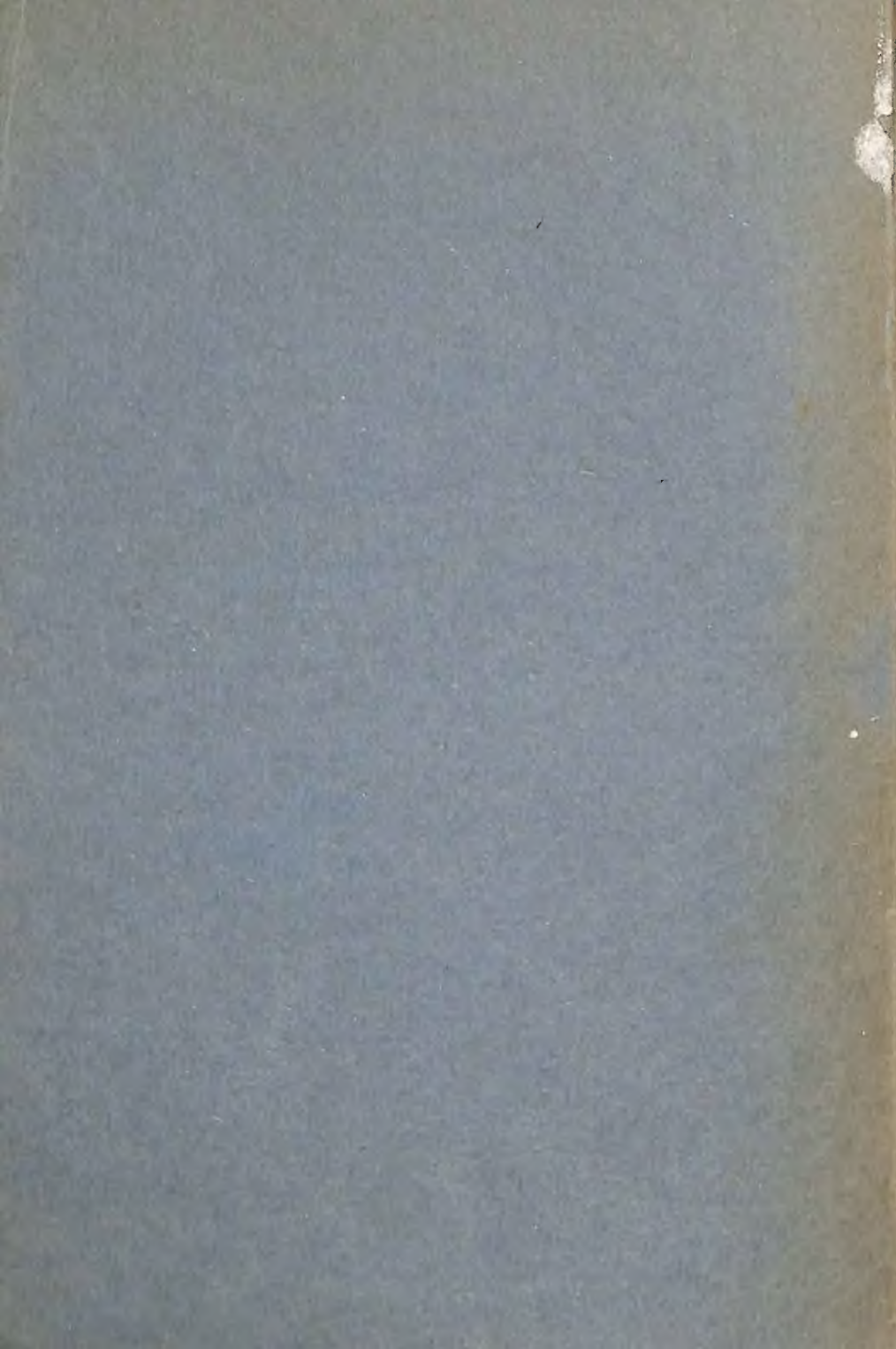


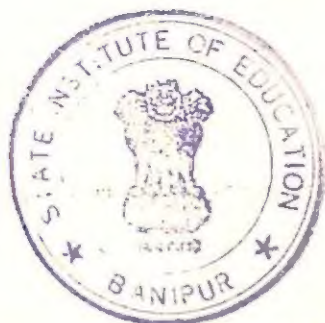
1829

TEACHING READING

A CHALLENGE







TEACHING READING

A CHALLENGE



December 1966

© *National Council of Educational Research and Training*

LIBRARY OF THE
25.10.05
12017

PRICE : Rs. 4

Published by Publication Unit, National Council of Educational
Research and Training, B-31 Maharani Bagh, New Delhi-14 and
printed at Delhi Press, Jhandewala Estate, New Delhi-1

FOREWORD

How to teach reading, how to improve programmes of reading, particularly at primary level, is an educational undertaking of the first importance. To this point in the educational process the individual and his guide turn repeatedly in later life to explain either why thinking is swift, precise and effective or the reverse. The need to analyze these processes, to enunciate new concepts of reading and to orient our teachers to them is a project to which the National Council of Educational Research and Training attaches the highest importance.

In the summer of 1964 a five-week training course on reading was held for a small group of teacher educators from primary and secondary training institutions and for selected teachers and principals of secondary schools. The course was conducted by the staff of the reading project of NCERT with the assistance of two distinguished colleagues of the University of Columbia Teachers College team in India—Dr. Constance McCullough and Miss Eleanor Robinson. To both the Council is deeply indebted.

The purpose of the course was to build an active nucleus of Indian educators who might form the spearhead of a reading movement. It sought to develop insights into the complex problem of 'teaching reading', particularly at primary level. It restricted itself to teaching reading in Hindi as a first language.

What follows is the present publication of contributions from the staff on a wide range of topics connected with reading, developed for the course.

This monograph, the National Council hopes, will
lever up standards and programmes of reading
instruction in our schools. We should be happy to
receive comments on it from teacher educators and
research workers.

20 September 1966
New Delhi

L. S. Chandrakant

PREFACE

Among the concerns of the National Council of Educational Research and Training which have been given high priority and attention, one relates to the field of reading. The reading project, undertaken by the Department of Curriculum, Methods and Textbooks, aims at developing a comprehensive programme for the improvement of reading, particularly in the primary classes. The project team, which started by making a special study of the problems involved in the teaching of reading, is at present engaged in the development of instructional materials as well as methods suited to the teaching of Hindi as the mother tongue in the primary classes. The project also aims at promoting studies and researches in vocabulary and language development and in techniques of teaching and testing reading.

The need for orienting teachers and teacher educators to new concepts of reading became quite apparent in the early stages of the project. An attempt was therefore made to develop an in-service programme as well. The first step in this direction was a five-week training course in reading conducted at Nainital in the summer of 1964. This monograph represents the thinking of the team which conducted it, on the different facets of the central problem discussed during the course.

The monograph is the first of the series of such publications that the project hopes to bring out. I therefore take this opportunity to place on record our deep sense of gratitude to Shri Raja Roy Singh, former Joint Director of the National Council of Educational

Research and Training, not only for having initiated the project but also for the continued encouragement and valuable advice he gave us at every stage. I would also fail in my duty if I did not acknowledge our gratitude to our consultants Dr. Constance M. McCullough and Miss Eleanor G. Robinson, as much for their expert guidance as for their active collaboration in whatever the project has been able to achieve so far.

B. Ghosh

18 January 1965
New Delhi

CONTENTS

Foreword	iii
Preface	v
Reading: A Point of View	1
An Exploration of Problems in Reading	16
<i>A. Chari</i>	
Maturity in Reading	24
<i>C. M. McCullough</i>	
Reading in the School Curriculum	28
<i>A. Chari</i>	
The Nature of the Learner	35
<i>C. M. McCullough</i>	
The Reading Process	51
<i>C. M. McCullough</i>	
Beginning Reading	55
<i>D. S. Rawat</i>	
Developing Reading Readiness	70
<i>C. Chacko</i>	
Teaching the Reading of a Language	86
<i>C. M. McCullough</i>	
A Good Reading Lesson	104
<i>E. Robinson</i>	
Thought Patterns in Expository Writing	109
<i>C. M. McCullough</i>	
Reading Comprehension	138
<i>C. Chacko</i>	
Development of a Reader Series	151
<i>A. Chari</i>	
<i>C. M. McCullough</i>	
Children's Interests	179
Developing Children's Literature	186
<i>A. Chari</i>	

Awareness of Excellence	194
<i>C. M. McCullough</i>	
Evaluating Reading Ability	202
<i>D. S. Rawat</i>	
The Preparation of Teachers	212
<i>Raja Roy Singh</i>	
Areas of Needed Research for India	218
<i>D. S. Rawat</i>	
Meeting the Challenge—Valedictory Address	226
Appendix A	232
Appendix B	240
Appendix C	247
Appendix D	257
Appendix E	260
Appendix F	262

READING:
A POINT OF VIEW

READING IS finding out what an author has said, trying to think what he meant by it, and deciding what sense it makes and how good it is to the reader. To find out what an author has said, the reader has to recognize the words the author uses and must know the meanings of those words as the author has used them. He must know the meanings of the sen-

tences he reads, and must understand what the second sentence does to the meaning of the first sentence, and so on. As the reader reads, he must think what the author must have meant by what he said. He must decide whether the author's ideas are making sense to him. As he reads he may also find that he wants to remember some ideas, while others he may quite afford to forget.

Why is reading all of these things? Because, if it is less than all of these, it becomes a meaningless, if not a positively dangerous thing. If a reader only finds out what the author said but does not think what he meant by it, the reader is no better than a parrot. If he reads aloud and repeats what he has not understood, he may be repeating a lie.

If he reads without thinking what the author meant, he is getting nothing out of the 'reading' except practice in seeing and saying letters and words. He will quickly forget what he does not understand. He could use his time in a better way.

If the reader reads without thinking about the use of the idea to him, he may readily forget an idea which could make his life richer and more useful. The idea may be a joke he wants to remember to tell his friends. It may be a better way of doing something. It may be a way of being a better citizen. It may be an idea the reader has been looking for, for many years, to explain something he has not understood. *These are all uses of reading.*

Reading may be done for other people to hear, or it may be done silently. The good reader learns to read aloud so that people can enjoy and understand his reading, but he also learns to read silently for his own purposes because silent reading can be much more rapid than reading aloud.

WHY DOES A CHILD WANT TO READ?

The reasons a child has for wanting to read are not the same as his parent's reasons or his teacher's reasons or his country's reasons. Our country wants citizens who can read and make decisions, workers who can read what they must read to do their work, people who find part of their happiness in books.

The teacher wants the child to learn to read because he will be teaching many subjects through books. If the child cannot read, the teacher would be at a loss. Besides, the teacher is also a good citizen. He cares about the future of India and knows that the future will be better if the citizens are better. He must make the child a better citizen through reading.

Parents want to be proud of their children. They want the child to have a better life than they had. They think one of the keys to a better life is in reading. Their child must pass examinations, get scholarships, succeed in school and have a fine education. Then only can he get a good job afterwards and grow to his fullest capacity.

But why does a child want to read? He may want to read because the people he admires read. His relatives have read to him and he knows that there is fun in books. He sees signs on the street, the shops, and wants to know what they say. He doesn't want to have to ask people. He wants to be able to do things for himself, and reading is one of those things.

As the child learns to read, he can find new reasons for wanting to learn to read. If the learning steps are small enough for him to do each harder thing the right way, he finds happiness in success. If the teacher makes him think about the likenesses and differences in sounds and words, he enjoys solving the puzzle. Learning to read becomes another chance to find out for himself instead of being told, to use his own good

head and feel 'grown-up'. If he keeps a booklet of all the things he knows, he is proud as more and more pages are filled. He is pleased to see the number of words he can write with the letters he knows, the stories he can write with the words he knows, the number of words he can read, the ease with which he can sound out new words, the ease with which he can figure out the meaning of a new word from the way it is used in the sentence. He likes to be the first to find the answer to a question, to read aloud and have other children listen.

Learning to read is hard work. The teacher must use all the ways he can to make the child feel that his own desires are satisfied by the effort.

WHAT IS THE AIM OF READING ?

The aim of reading is to give each person the power to find out what the author has said, to understand what he has said, to consider the value of what he has said and to use the knowledge profitably. The reading programme should make the child want to read all his life for enjoyment and for information. It should make him sensitive to good writing, so that he prefers something well-written, well-said, to something poorly written, poorly said. The contents of reading should help him to be a better person, learning to live amicably and helpfully, learning to think and to behave as a good citizen of his country should think and behave. He should become acquainted with all types of reading material (plays, stories, poems, essays, letters, notices, signs) and with the make-up of newspapers, magazines and books (including dictionaries, encyclopaedias, etc.). He should develop the habit of reading something every day. While he should not believe everything that is printed, he should be as skilful in finding the good in it as he is in finding the

flaw in it. He should think of reading as one of several ways of seeking the truth, of gaining a broader and deeper look at life than he is able to now.

Since the aim of reading is not simple, the teaching of reading consists of many kinds of effort by the teacher, many kinds of activity and material for the learner. Just as it helps the teacher to know why he is to teach in certain ways, so it is helpful to the child to know the value and purpose of the things he is required to do.

HOW DOES A CHILD LEARN TO READ ?

One way of learning to read is to learn the sounds of letters, then to sound the letters in each word and then to try to think what word the group of letters makes. This method is usually advocated as best suited for Hindi because of the phonetic nature of the language. It is true that, by and large, it is possible in Hindi to associate sound with letter and benefit must be derived from this fact. But there are also a few special problems that Hindi poses that are usually lost sight of in teaching beginners to read. For example, the initial consonants in a word such as **मदन** or **कलम** are sounded with the vowel in them, whereas when these same consonants occur in the final positions of words as in **आम** or **नाक**, they are not sounded with vowels. Then, again, there are in Hindi two ways of writing the vowels—one with the letter-symbol and the other with the matra. And there are special signs such as the **अनुस्वार** for certain nasal sounds. These points can make reading by sounding letters difficult for the beginner.

Besides, a child who learns by this letter-method only, reads very slowly. He looks at the print, letter by letter. This is the slowest way to look at it. If a child learns by a word method, he reads faster the

words he has learnt, but he does not know what to do with the words he has not learnt. By thinking of the meaning of a sentence he can sometimes figure out what the unknown word is, by the way it is used in the sentence; but he may be wrong. He needs not only to see whole words but to learn how to study the letters and parts of words, too.

The faster way to read is to look at whole words, whole phrases. The child learns whole words by being shown whole words and being told what they have to say. The child looks at the word, says the word, hears the word. As soon as he can form the letters of the word well enough to write the word, he looks at the word, says the word, and writes the word. Then he looks back at the word to see whether his word is like the one he was shown. The child who sees, hears, says and writes a word, usually learns it better than a child who does only two or three of these things.

There is one big problem, however: if the child does not know what the word *means*, he is not going to remember it very well. He may know the shape and be able to write it, but he will not know what it says. Or, he may remember that he learnt the word but he won't know which of the shapes he learnt stands for the word. He will seem to have learnt it one day, and the next day he will not know it. Therefore, the teacher has to make sure that the child knows the meanings of the word he learns.

So, in order to learn to read, a child must know the meanings of the word he is to learn. He must be able to use these words in sentences of his own making and speaking, before he is asked to read them in print.

After a child learns several shapes of words, he begins to see that some of the words are very much alike. They may start with the same letter, like मछली and मकड़ी or they may end with the same letters, like कलम, आम. They may have only one small difference,

as in पंख and पंखा . The teacher helps the child to see these things that are alike or different by writing one word below the other, having the child find the part that is the same or different. If the teacher does not tell the child which part is the same or different, and if the child finds it from the teacher's questions, the child remembers the learning better.

A child, then, learns to read by seeing words as wholes, by being able to see that one word is different from another, by being able to find the same word in another sentence, by being able to hear difference and likenesses as well as to see them, by being able to figure out the meaning of a new word by the way it is used in a sentence, by the picture on the page, or by sounding it out and knowing it as a word he has heard and used. The sounding out is faster if the person recognizes some letter-groups. Below are examples:

लिया	आओ	भालू	यह	रविवार
दिया	खाओ	आलू	वह	सोमवार
गवैया	हिमालय	पाठशाला	उपकार	अनपढ़
नचैया	शिवालय	गौशाला	उपहार	अनजान

The new approach to teaching reading could, therefore, combine some of the best elements of the conventional letter-sounding method with the recent findings of psychology and linguistics.

The learning of the letters and words is more certain if the learner uses what he has learnt in at least two ways: (1) reading a great many sentences and stories made up of the words and letters he knows, and (2) writing words and sentences of his own with the letters and words he knows. These two kinds of activity make him think of the form and the meaning of the things he has learnt. After some interval and

practice, the form and meaning are so 'grown together' in the learner's mind that he thinks of the meaning as soon as he sees the form, without any trouble at all.

DO ALL CHILDREN LEARN AT THE SAME RATE ?

The teaching of reading would be much easier for the teacher if all children could learn at the same rate. But this is not the case. Some children learn quickly; some learn slowly; and some learn in between those rates. If the teacher teaches slowly enough for the slowest children, the work is too easy for the rest. If he teaches at the right rate for the average children, the slower children fail. Some of these slower children are among the forty per cent who do not return after the first year of schooling.

The main point for the teacher to know is that learning takes place by steps. A child should not, therefore, be asked to take the next step if the teacher knows that he has not mastered the one he has already taken. If the child is having trouble today, he will have much more trouble tomorrow, unless the problem is solved. The more individual attention a child can get in the early years, the greater is his success at school ensured. This is, no doubt, a difficult task in the face of large classes. One of the ways by which the task can be made easier for the teacher is by letting him begin with a suitable text that carries a good deal of the burden of teaching reading. Such a text should make provision for a graded scheme of exercises designed to build the reading skills.

WHAT ARE THE WORD-STUDY SKILLS ?

Three major types of word study are outlined below as suitable exercises: (1) whole-word recognition, (2) analysis of the parts of words, and (3) study of word-meaning.

(I) Whole-Word Recognition

The child is asked

— to recognize the word in a row of different words:

मीना	मदन	मीना	नीला
रोओ	रोओ	खाओ	रोना

— to recognize it in a sentence

उठो	१—देखो, मुझे देखो ।
	२—मोहन, उठो ।
	३—आगे देखो, आगे ।

— to find it among words that begin the same way

मदन	मकड़ी	मटर	मदन
नाच	नाच	नाम	नाना

— to find it among words that end the same way

खाना	माना	मीना	खाना
मिला	वाला	मिला	किला

— to find it among words that have another part the same

रहा	हार	रहा	हाथ
आओ	आओ	कौआ	आगे

— to find it among words that are of the same length or same general shape

गाजर	चादर	बाहर	गाजर
मेला	केला	मेला	खेला

— to find it among words which contain a letter almost like the one in the word

खोलो	बोलो	रोको	खोलो
रोओ	आगे	रोओ	खाओ

— to find the right word to fill the blank in a sentence

मुझे ————— मिला । (कहां, पंख)

————— नाच रहा है । (मोर, कौआ)

(2) Analysis of the Part of Words

The child is guided through a way of discovering the sounds and shapes of word-parts for himself. These parts may be: letters; combination of letters; larger parts.

He is given two words which have only this part in common. First he is asked to listen to the two words, say them, listen for the part that is the same and say that part alone. When he can do this successfully, then he is asked to look at the two words, say them and see the part that makes the common sound. In this way he is taught the consonants and vowels, and common parts of words he has read in the book he is reading. As he learns each letter and sound, he is taught to write the letter or the stroke until he forms the whole letter. When the letters he knows can form words that he knows by ear, he is asked to write these words. In this way, he discovers the parts and recombines them into words.

To help the child to pay attention to the part he is learning exercises require him:

—to find that letter in a row of words

मन	म	भ	स	प
देख	श	ख	स	ख

—to find that part in a row of words

मान	मानना	गिरा	हमारा	मिला
-----	-------	------	-------	------

—to find it in a sentence

हरा यहां पानी बहुत गहरा है ।
वह मेरे घर ठहरा था ।
दोपहर को बाहर मत जाओ ।

कार दूसरों का उपकार करो ।
खाना खाकर जाना ।
यह बिजली का कारखाना है ।

—to insert it in the blank in a word partially written

रवि————को छुट्टी होती है ।

(3) Study of Word-Meaning

As the child learns new words, he is given exercises which require him to pay attention to the meanings of the words as well as to their forms. He must read sentences containing the word and tell which of its several meanings is meant in each sentence. He is shown several words and asked to find and read the one that means a certain kind of thing. For example, if the word is कुत्ता, he may be asked to find the name of something that barks, something that guards the

house, something that can eat bones, etc. If the word is घर the child is asked to tell what it can be made of, of what shape it can be, what colours it may have, how big it can be, and what it may be like inside. To extend the idea of home itself, the teacher may ask what kind of home a fish would have, a bird, or a snake; what a home is for; what it feels like to be at home on a hot day, a cold night; where the child goes when he is hurt or tired.

Words are studied also for the meanings they have in comparison with other words:

- What is the opposite of ब (antonym)
- How many animals can the child think of? (classification)
- How are cows and horses alike? (comparison)
- What word means almost the same as गरीब? (synonym)
- What common name can be given to orange, apple, grapes, pear, mango, banana? (generalization)

When there are two or more ways of saying something and the author has used one to suggest the mood or feeling of the speaker, the child is asked what meaning the sentence would have had if the other word had been used, and what the use of this one in its place does to the meaning. The child is also encouraged to make up sentences using the word in its various meanings.

WHAT ARE THE COMPREHENSION AND STUDY SKILLS ?

Throughout the grades at school, the teacher should be encouraged to help the child to learn to locate information, read with understanding and appreciation what the author has to say, make judgments about the relative worth of the material, use it (by summarizing, outlining, illustrating, following direc-

tions) and remember it. Reading can be done for different purposes. If the reader is reading to get the main idea, he reads once with this in mind. If he is reading to get the facts in the order in which they are given, he reads again for that one purpose. If he is reading to see how a character changed in a story, he reads again, looking only for that. In this way, the child learns different ways of reading for different purposes.

The child is asked questions which make him use all the kinds of thinking that are possible for a human being. He is asked to predict what will happen next in the story; to decide what kind of person a character is; to tell what another good name would be for the story, and why; to tell how two situations or plots or characters are alike; to tell which character had the greater problem to face, and why; to plan and defend another way in which the problem could have been solved; to explain why a certain thing happened; why it had to happen; what change could have prevented it; to tell what the story proved; to tell what the story showed about the author. The teacher accepts all reasonable answers, even though they are not the ones he happened to think of himself.

In these ways the child learns that reading includes thinking and is not just a matter of saying words.

HOW MAY ACTIVITIES IN OTHER AREAS OF THE CURRICULUM BE RELATED TO READING?

Sometimes a story tells about eating food. Here is a chance to talk with the children about habits of washing hands, cleaning the food—matters of health. A story may present a problem in arithmetic. Here is a chance to solve it with the arithmetic the children know. A story may tell about a certain animal. Here is a chance to talk about its characteristics, how it

looks, what its habits are, where it lives, what it can do, what it is good for. Children want to know more, and the teacher helps them to find the information in a dictionary, an encyclopaedia, or other book. Or perhaps the information will be in a newspaper or perhaps someone in the neighbourhood knows the answer. The teacher uses the story in the reader as a starting-point for discussion and study of many related ideas in arithmetic, science, social studies, art, music and dance.

Enrichment activities are things the children do to extend their knowledge, to use what they know, and to strengthen the skills they are developing. These activities include many things which a child can do alone. Some of them can be planned for the child who reads the lesson well and can do many things for himself; others for the child who needs much more repetition of the words and skills he has been working on. A piece of music may be recommended if it has connection with the story. If a poem can be sung the children may learn the song and, as they do so, learn the poem. The mood of the song should help the child to understand the poem more than he did on its first reading.

HOW CAN READING PROGRESS BE MEASURED ?

The teacher's questions on each lesson are a test of what the child has been able to understand. Skill exercises which use old skills to build new ones are a test of the firmness of those old skills. The child's workbook can show what he has done and how well he has done it. Tests of reading skills may be designed for testing specific purposes.

Beyond these clues to progress, the teacher can note the books the child is reading 'on his own', whether he reads at home or at every chance in school,

whether he seems to be eager for the reading lesson. whether his eyes dance when someone mentions a book he has read, whether he seems completely attentive to his book as he reads a story, whether the stories he writes himself show growth in the sentences and ideas he attempts and the words he uses. All of these things reflect progress in reading.

*AN EXPLORATION OF
PROBLEMS IN READING:
SPECIFIC QUESTIONS
PERTAINING TO HINDI*

WHAT ARE some of the specific questions to be answered with respect to Hindi in seeking the improvement of reading instruction? An examination of the problem highlights three areas as of prime significance:

- Questions pertaining to the nature of the learner;

- Questions pertaining to the nature of the language;
- Questions pertaining to the methods of teaching reading in that language.

THE NATURE OF THE LEARNER

We need to know more about Indian children, their interests, their levels of language development at different ages, their grasp of concepts, the difficulties they face in learning to read, and about ways of stimulating language growth; for these are fundamental in acquiring the right skills, habits and attitudes to reading. There exist now no lists of adult or children's vocabulary, spoken or written, for any age-groups in Hindi. Some work is available in the South Indian languages, in Gujarati, Marathi and Bengali, but these are again limited studies. We need to turn our attention to the compilation of basic vocabulary lists in the Indian languages; for, till such lists are available, decisions regarding the language content of textbooks and other reading materials prepared for children will always remain arbitrary.

Apart from the question of vocabulary we have as yet no information either, about

- what patterns of structure appear in the oral language of children;
- to what extent these patterns of structure are related to the variables of age, sex, intelligence of children and the socio-economic background and education of parents;
- whether the patterns children use at different levels are found in the textbooks;
- what relationships appear at each class level between the structure of children's oral language and their silent reading comprehension; between

oral reading interpretation and listening comprehension.¹

THE NATURE OF THE LANGUAGE

A second area of enquiry is with respect to the nature of the language itself. It is very essential to have a complete linguistic description of the language we are about to teach, as this has immense implications both for the method adopted in teaching, reading and writing and for the preparation of reading material. One reason why so much thinking has been possible in the teaching of reading in English is that there is evidence of more linguistic research in English than in any other language in the world. Vast studies have been made in providing convincing descriptions of the phonetics of English and of its structure. The classroom teacher has much to learn from the contributions of the linguist. The spoken word in a language consists of characteristic sound units which present special speech and hearing problems. The spoken sentences in a language have characteristic structures and sequences which affect both oral and silent reading. Written words in a language range from simple to complex. The choice of words introduced in language texts for the early classes must be made partly on the basis of simplicity of form, partly on familiarity or vividness of meaning. Our main difficulty in Hindi is that there exist not many sound descriptions of the language at all levels: phonology, lexis and grammar—and such studies are essential for any systematic preparation of reading materials or any deci-

1. A significant study that aims at finding answers to some of these questions with regard to English is reported in: Strickland R. 'The Language of Elementary School Children: Its Relation to the Language of Reading Textbooks and the Quality of Reading of selected children'. *Bulletin of the School of Education, Indiana University*, Bloomington, Vol. 38 No. 4, 1962.

sions regarding methods of teaching. Besides, even whatever is being attempted in this direction at different institutes, research centres and universities in India and abroad needs to be collated by some central agency so that steady progress can be maintained and duplication of effort avoided.

METHODS OF TEACHING READING

Questions pertaining to the methods of teaching reading are also important and deserve close attention. It is argued by some that when a child enters school at the age of about six he already has in his command a good stock of vocabulary and almost all the structures of the language. Reading materials in the first language, therefore, according to them, do not require much attention in the matter of a systematic grading of vocabulary or structure. Pupils should launch into an appreciation of literary form, idiom and style early enough when learning the mother-tongue.

Besides, it is further argued that in learning to read Hindi, which is phonetic in nature, it is sufficient if children are taught the sound of the letters of the alphabet so that they can thereafter sound out every word in that language. A study of several Hindi primers in use reveals a modified phonetic approach. Each lesson deals with the letter, usually beginning with the consonant, and this letter is presented accompanied by pictures representing words, of which the initial sound is the same as that of the letter. This technique, often called the 'key-word' method, has been in use for hundreds of years. As the word is pronounced attention is directed to its initial sound. This in turn is associated with the letter printed in the primer. The letters and sounds are thus learnt and simultaneously the writing practice of the forms of the letters starts. Teachers tell us that they are able to 'cover the alpha-

bets and sounds' in Hindi during the first few months of class I and then begin the first reader. Most readers introduce words and sentences selected for their use of the matras. While the association of sound with letters in the case of Hindi must be capitalized as an aid to word-recognition and pronunciation, the point remains that learning to read by sounding out letters is a very slow process and hinders quick and immediate recognition of the whole word. When a child gets used to sounding out letters, if you show him a word quickly and then remove it from his sight, he cannot tell you what it was. He does not look at words as wholes but as a combination of bits and this is the greatest obstacle in his gaining speed in reading comprehension.

It is, therefore, essential that we examine current methods of teaching reading, particularly in the primary classes, with a view to determining whether the approach is suited to the nature of the language being taught and whether it is effective in developing reading abilities. We need also examine the idea of using a controlled vocabulary in the preparation of a systematically graded series of readers and its implications for teaching of reading in Hindi. A study of recent language texts in vogue in English and used both in the U.K. and U.S.A. reveals a totally new approach to the teaching reading. Have these principles any meaning at all for building a reader series in Hindi, or, must we ignore the findings of researches because 'Hindi is phonetic, while English isn't'?

THE IMPORTANCE OF CONTROLLED VOCABULARY

An important idea in the philosophy of controlled vocabulary is that reading skills — like other skills, are learnt when everything except the new learning is familiar and easy for the learner. The textbook with a controlled vocabulary makes it possible to teach the various

skills of reading with a minimum of obstacles for the learner. The new words are learnt in settings of old words. When the new words have become familiar in the first reading of a story and in further discussion and observation, such matters as paragraph structure, sentence structure, plot structure, grammatical agreement, word choice, main and subordinate ideas, implications of the content and new techniques of analyzing forms and meanings of words can be treated in this familiar vocabulary.

Most beginning readers in Hindi use a different type of control: that of limiting the the matra used to one at a time. We need to examine whether this is necessarily sound or whether texts can be prepared with a different type of control over words and structure, making the reading matter interesting and purposeful. Consider how artificial the following sentences compiled from some readers in use now sound, and whether pupil interest can be sustained on such fare:

- जल भर कर चल ।
- पनघट पर कसरत कर ।
- लीला की घड़ी, शीला की घड़ी
मीरा की लड़ी धरती पर पड़ी ।
- भेड़ शेर पास पास खड़े थे ।
- कैलाश का थैला मैला है ।
- नौका आई । नौका में एक औरत आई । औरत हमारी मौसी
है । मौसी के साथ नौकर है । मौसी कचौड़ी खायेगी ।
- वृक्ष के नीचे मृग तृण चर रहा है ।

THE PROBLEM OF DIALECTS

Yet another problem that is special to Hindi and will have implications in the development of an effective reading programme particularly in Class I is that

most pupils on entering school speak a local dialect and the transference to the *khari boli* form of Hindi must be planned and gradual. We often take it for granted that the words as they appear in the primer and early readers are 'known' to children, but, in actual practice, teachers face a difficult problem in making the reading meaningful. Reading is a complex process and, if progress is to be ensured, it demands pupil's capacity for correct auditory discrimination of sounds and accurate visual perception of symbols on the printed page with a quick association of meaning with both. Pupils must be helped with exercises and drills in making the transference from any one of the dialectical forms of speech such as Braj, Avadhi, Kumauni, Bundelkhandi, Bhojpuri and Chattisgarhi to *khari boli*. In our pilot study aimed at compiling children's spoken vocabulary in the primary grades, the incidence of dialectical forms in the speech of children of the above dialectical areas was found to be large and the differences are of both categories: (1) where the change is minimal, in the structure of the word as in थालियां or थारी for थाली or करत, करलन for करना, and (2) where a totally different word is substituted for its *khari boli* equivalent as दन्याव for हल or बन्ना for दूल्हा. Making teachers aware of the difficulties their respective pupils are likely to face in learning to read *khari boli* and guiding them with specially prepared materials for coping with the problem intelligently is a task that must be given some weightage. An equally important challenge that linguists must face is that of examining the possibility of accepting some of the most commonly understood dialectical forms of Hindi words into the gamut of *khari boli*, thus enriching its content and ensuring its living form. Common experience tells us that *khari boli* as is used today does not include many of the common dialect words, on account of which it loses some of the charm. Can we not consider the possibility of enriching *khari boli* by

bringing into educated usage some of the most common of the dialect form?

THE VALUES WE INCULCATE

The above considerations highlight the need for the conduct of fundamental studies leading to the development of suitable readers and other literature as the improvement of reading instruction hinges upon two factors in the main: teachers with knowledge and insight, and good materials that the teacher can use. A great deal of thought has to go into the preparation of materials, for books are the means through which we develop in our pupils their sense of values, their sensitivity, their judgment of right and wrong. Consider how much harm can ensue, though unconsciously, from a poem in one of the readers included supposedly, for teaching patriotism but which says:

औरों से न अपना काम
लेंगे हम भारत का नाम ।

Or what are we teaching in these lines: thrift? principles of health? proper attitudes?

फेंको मत, यह मांड नहीं जी, पेड़ा है
खाओ मत, यह भात बहुत ही गीला है ।

Apart from questions of language gradation, careful thought must be given to the selection of themes.

All this means that the improvement of reading instruction cannot be regarded in isolation as a task that falls within the purview of the classroom teacher alone. It demands concerted effort on the part of linguists, psychologists, educationists and research workers, not to mention printers, publishers and parents. It demands bold studies of a fundamental nature to be undertaken by several institutes and research departments all over the country.

MATURITY IN READING

PEOPLE SAY, 'We should do things the way we did them in the good old days. Let's not go in for fancy new methods. The old ones were good enough for grandpa and they're good enough for our children, too'. If the old days were so good, the adult population educated in the good old days must be very good products

of that old education. How well do they read? Do you know? How could you find out?

One way would be to go into a typical city or town or village, whatever that would be, and make a sampling of people in that place. Some would have less education, some more; some less money, some more; some poor homes, some better; some important positions, some not so important; some would speak Hindi at home, some a dialect of Hindi, and some quite another language; some would have no reading material in their homes, some would read a newspaper, some would have books and magazines; some would live near a public library or a bookstore, and some would be farther away.

When you found these people, you would ask them a set of questions about their schooling, their language, their income, their employment, and their reading habits. You would probably ask them what they have read recently and what they thought about it and why. You might ask them to read a short passage you have brought with you, and to answer certain questions about it, which show their grasp of the passage and their reaction to and use of the ideas presented in it.

You might ask 'Whom do you know that is "well-read"?' By that you would mean, 'Who reads a great deal? You mention a book, an article, and he knows about it'. You would then go to the people identified as 'well-read' and ask them many questions about their schooling, language, income, employment, and reading habits. You would ask them to read and react to a passage or two which you had brought with you. A few of these people you might study intensively. What would you find out?

The only way to answer that question is to make such a study and get the answers from it. Dr. William S. Gray and Dr. Bernice Rogers made such a study in the middle-western part of the United States and reported it in 1956. In their report, entitled *Maturity*

in Reading, you will find lists of all the questions they asked, all the skills of reading they considered, and the passages they asked people to read.¹

Perhaps your findings would be similar to their findings. They found that most adults in the American population studied did not read very well. They read little, and what they read was not usually challenging in idea. People who worked with things (as in a factory) tended to read less than people who worked with ideas. College graduation was no assurance that the person read well: in fact, some people of much less formal education had become good readers in spite of little schooling.

People who spent a great deal of time in reading were not always people who read well. That is to say, much that they read was trivial, and, when it demanded more than a little thought on the part of the reader, they did not get the whole or deeper meaning. Some people read so slowly that, although they read a great deal of the time, they did not read much material. Some people whose college education had given them skill in understanding the author's message and evaluating it did very little reading for pleasure and read only a few topics (such as politics or sports) and kinds of material (such as poetry, drama, short story, etc.).

The people whom Gray and Rogers were able to identify as 'mature readers' could remember a teacher or a parent who had inspired them with the values of reading. These mature readers now read a great many different kinds of material on a great many different subjects, but they had one or two strong interests which impelled them to read as much as they could find on those one or two subjects. They were not just readers, but seemed eager to learn by all sorts of means: listening, discussing and observing.

1. Gray, W. S. and Rogers, B., *Maturity in Reading*, University of Chicago Press, 1956.

As the mature readers read on more and more topics and as they read more and more about one or two topics, they found the need for the development of more skills in reading. Figuratively speaking, as they went out into deeper and deeper water, they could no longer walk, or tread water; they had to learn to swim. Thus the more they read, the more their skills were challenged, and the more they had to improve their skills of reading. Maturity in reading, Gray and Rogers decided, was not an achievement; it was, rather, a process of continuous growth: expanding and deepening interests, challenges to skills, and development of greater skills. They spoke of it as a 'spiral effect'.

The investigators found that mature readers had, possibly through their extensive and thoughtful reading, developed an objectivity, a less partisan and narrow view, a keen sense of their social responsibility.

When such a study is made in India, Indian language teachers will see to what extent the parents, teachers, librarians, and publishers have achieved creating an interest in life-long reading, teaching the skills of reading, and making good reading material available at prices people can afford. Chances are that none of these people who influence the reading habits of future citizens can sit back and say with a clear conscience, "The old ways were good enough".

READING IN THE SCHOOL CURRICULUM

It is often asserted that education should not be confined to the mere learning of the three R's. Teachers are exhorted to take a broader view of the school curriculum as being inclusive of all the 'learning experiences' planned and organized for the pupil's progress at school. While there is much truth in this

assertion, it is equally important to emphasize that the learning of the three R's is not to be neglected. What is essential is that there should be a well-planned and balanced programme of experiences wherein the acquisition of the knowledge in the various disciplines and the systematic learning of skills is ensured. This section deals with the place of the first of the three R's in the curriculum—viz., reading.

POPULAR NOTIONS ABOUT READING

At the outset we might clarify popular notions that exist in our country about reading. In the first place reading is often taken as being synonymous with 'reading aloud'. If you asked a teacher: 'How do your pupils read?' or 'Are you satisfied with the reading in your school?' the answer would invariably make a mention of the fall in standards of pronunciation and diction, indicating thereby that the teacher had understood the question as referring to the exercise of 'reading aloud'. There are two words used in Hindi. The distinction between reading as **वाचन** and reading as **पठन** needs to be understood and the fuller dimensions of **पठन** grasped.

Secondly, most people are satisfied with a very limited description of the reading act as consisting chiefly of the exercise of deciphering the graphic symbols on the printed page. According to this view, learning to read comprises the building up of the mechanical skills of the reading act.

We believe, however, that reading is all this and much more. It is a skill: a complex that has to be learned gradually and in stages. It is essentially concerned with getting the meaning from the printed page. In its fullest sense there can be no reading unless comprehension ensues. We distinguish four components of the total reading process: word-perception, comprehension, reaction and integration. We can comprehend

what we read only if we can associate meaning with the printed symbols on the page. When the knowledge we acquire through reading is thoroughly integrated with what we already know, our total experience is broadened.

If we examine the language curricula of our primary and secondary schools, we find that mention is made of reading as being one of the skills to be acquired, the others being speaking and writing. But when the details are spelt out in the syllabus it is linked with the intensive study of a prose text with the result that all the reading experience that most students get is confined to that one text. It is important to recognize the acquisition of the reading skill as being more important than the study of one text. The text is but the means towards that end.

READING AND OTHER LANGUAGE SKILLS

Reading as such bears a close relationship with the other skills in the learning of the language—viz., listening, speaking and writing. Many studies conducted for English show the high correlation that exists between pupils' listening ability and level of reading comprehension.¹ Training in auditory discrimination and listening capacity help in achieving greater success in reading (though it does not follow that deaf children cannot be taught reading). Besides when a child brings an enriched meaning vocabulary to his reading he is able to read with greater power and understanding. A varied and rich experimental background helps reading. The opportunities afforded in the classroom and outside to develop speech and oral expression have much to contribute to the building up of reading skills and vice versa. A student who reads well and widely has something to say and can be helped to say it correctly and fluently.

1. Gray, W. S., *On Their Own in Reading*, Scott Foresman, Chicago, 1948, p. 37.

Similarly, reading and writing go together as twin skills, each helping the other. The four language skills are evidently interdependent, and it is for the language teacher to exploit to the maximum their inter-connections.

STAGES OF DEVELOPMENT IN READING

It might be useful to recount the stages of development in reading as outlined by Gray¹ as good indices for the planning of the language programme for the school. These are spelt out below with reference to our primary school:

(1) The stage at which readiness for reading is attained

This has great importance for us in the early part of class I and must be recognized as important. Pupils need to be guided carefully in this respect upon their first entrance into school.

(2) The initial stages in learning to read

By the end of class I and certainly by class II pupils must be helped to acquire an interest in learning to read and in continuous and independent reading.

(3) The stage of rapid progress in fundamental reading attitudes and habits

Teachers must plan to guide pupils by about class III to progress in 'accuracy of comprehension, depth of interpretation, independence in word recognition, fluency

1. Gray, W. S., 'The Nature and Organization of Basic Instruction in Reading' in N.S.S.E. *The Teaching of Reading*, Thirty-sixth Year book, Part I, University of Chicago Press, 1937, pp. 76-81.

cy in oral reading and increased speed of silent reading'.

- (4) The stage at which experience is extended rapidly, and increased power, efficiency and excellence in reading are acquired.**

This should normally cover classes IV and V. The language programme should cater for 'greater power in comprehension and interpretation, greater efficiency in rate of reading and in reading for different purposes, improvement in the quality of oral reading, the extension of the pupil's interests, the elevation of reading tastes, and greater skill in the use of books and other printed sources of information'.

In the later years of school the language curriculum should provide for the further refinement of these skills, attitudes and interests in reading.

All this will require that attention be paid to the development of suitably graded reading and instructional materials, the selection of effective methods of teaching reading at the different levels of school and the provision for desirable means of testing reading growth.

READING AND THE OTHER SCHOOL SUBJECTS

Another aspect of the problem is with respect to the relationship of reading to other school subjects. It must not be forgotten that even in the study of the other school subjects, such as social studies, science and mathematics, the pupil engages in reading activities. Pupils need to be trained in the art of reading for different purposes and this will be the combined responsibility of the language teachers and the teachers of the different subjects.

Reading problems in the subject areas present two main difficulties to pupils:

(1) in the learning of the specialized vocabulary of that particular subject, e.g., the word *state* in English has a special connotation in civics; the word *root* a special meaning in biology.

(2) in learning the technical terminology peculiar to each subject e.g., in geometry the pupil must understand what is meant by *radius*, *diameter*; in geography by *peninsula*, *equator*; in physics, *neutron* and *electron*.

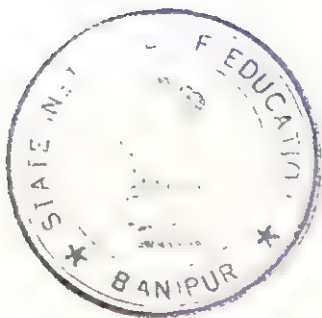
Now learning the concepts and the technical terminology falls naturally within the purview of each subject area, but acquiring the right study skills involved in coping with extended reading in these areas should be the concern of all teachers. Reading materials in the subject areas must, in the first instance, be developed, with attention to the reading problems at different levels and the presentation of new vocabulary with the words already known to children.

The total reading programme of the school must provide for developing increased competence in the various study skills, as for example:

- ability to locate the different parts of books with the help of a table of contents, index, etc.
- ability to interpret maps, diagrams, graphs, etc.
- ability to use a dictionary or an encyclopaedia
- ability to discriminate between fact and opinion, relevant and irrelevant material
- ability in organizing material such as
 - selecting the main idea;
 - grasping relationships;
 - arranging ideas in proper sequence;
 - summarizing;
 - taking notes.

This list is by no means exhaustive but will indicate the types of skill involved in the purposeful reading of different types of materials in the content fields. It

must be emphasized that pupils must be encouraged to read widely in the different fields, which in turn would necessitate taking a good look at our methods of instruction in all those areas.



5

THE NATURE OF THE LEARNER

TO TEACH a child to read it behoves the educator to understand how a person learns. The child must recognize the printed symbols as representations of sounds which in turn are symbols of meaning in the language of his parents (or the people closest to him in his early years). Unless he understands what the spoken

symbols mean he cannot understand what the written symbols mean. How does he develop these understandings?

THE STUFF OF LANGUAGE

utterances and pauses	words and grunts	sentences and fragments	pronunciation stress pitch intonation pauses behaviours	situation ideas times
-----------------------------	------------------------	-------------------------------	--	--------------------------

The new-born child must be a learner if he is to be very comfortable in this world. His attentive stare and his careful listening search for meanings and connections in this strange place.

All sounds have the possibility of meaning, but ultimately he becomes aware of the stuff of language as the people who speak to him make utterances and pauses. Associated as these utterances and pauses are with pats or food or comfort, they become important and interesting.

The adult dealing with the child expresses his ideas and feelings in wordless grunts and words, in sentences and fragments of sentences. He pronounces his words in a special way, perhaps stresses certain words or syllables, speaks in certain pitches (in some languages, such as Chinese, a different pitch for the same word denotes a different meaning), uses an intonation expressive of attitude, pauses for breath, effect, or want of ideas, and uses certain behaviours (head movements, facial contortions, hand, arm, shoulder, foot, leg, body movements) to convey meaning. At certain times and in certain situations the child learns to expect certain treatment and certain language with it.

Gradually these utterances and pauses become a bit intelligible as the child begins to hear a unit of sound

repeated over and over. The identification of a word as a sound 'personality' is aided if the adult accompanies that word with the same action, the same mood, and the same (for the child) sensations. The child begins to know what the adult will do when the adult speaks the word. Eventually the speaking of the word without the action conveys the idea of the action to the child. 'Bahut achchaa' becomes as good as a pat. 'Nahin' becomes a good reason to stop doing whatever the child is doing.

Meanwhile the child is exploring his own powers, and one of these is to make sound by expelling the breath and to alter it by different positions of the lips, gums, and tongue, and the muscular control of the throat. In this exploration the child makes all of the sounds that language employs. He has the potential to become a speaker of Hindi, Urdu, Bengali, Tamil, Kannada, or any other language.

But his family has special plans for him. By uttering only the sounds of the native language, the family limits his speech model to the sounds and sequences of sounds in the one language. (As a school-age boy or adult this same child will find it difficult to make the unpractised sounds of another language—something which as an infant he enjoyed literally and figuratively as child's play.) The child naturally and willingly—in fact, with evident interest and enjoyment—imitates the sounds he hears, and practises them over and over as though for self-entertainment or the expression of power. He cannot walk. He cannot talk. He cannot help himself. But he can make noises.

How does the child perfect his speech? By imitating the sounds of the adult until they are intelligible means of communication—that is, until the adult recognizes the sound the child makes as an imitation of his own. Faulty reproduction of the adult sound is inhibited because it does not produce the desired result. There is a built-in measure of success, and consequent

reward, if the adult understands; a built-in measure of failure and encouragement to discard, if the adult does not understand.

There are two unfortunate elements in this otherwise ideal learning situation (the learner spending practically full time as a student of language in order to achieve comfort). One is that the adult, recognizing the intention of a faulty reproduction of his words, responds to the child's utterance as the child wishes — with the kind of attention the child wants — giving him no incentive to improve and no model for improved imitation. Some parents imitate the child's speech, so that the learner becomes the teacher, and the child remains on a plateau of learning while the adult deteriorates! The second element is that the adult's own language may not be the best example of the native language; thus the child imitates faithfully all the mistakes of his elders, which become so habitual that they are hard to eradicate later. (In fact, one who has eradicated such mistakes in his language, or who thinks he has, finds himself reverting to the old habits in highly emotional situations.)

The ideal situation, which is probably rare, is that the adult speaks properly, the child imitates, and the adult corrects when the child is wrong. The correction may be the withholding of the desired object or action until the proper sound is made, or the correction may take some other form. Whatever it is, it usually keeps the child striving for improvement until the adult is satisfied that the child can do no better at his age and with his toothless gums.

THE INVOLVEMENT OF THE WHOLE PERSON

The acquisition of language is not only the task of the young child but the task of the human being at every age. With new experiences we encounter new

words — that is, words new to us. With new developments in man's attempt to understand and control his environment, there are new labels for previously unobserved or previously non-existent things. Old words, too, are used with new meanings. How do we acquire these expressions?

It is not a simple task. It involves the whole person. All the senses are brought into play. Who knows a lion until he has heard him roar and has recognized his roar as different from that of another beast? Who knows a horse until he has seen the shape as different from the cow's or donkey's? Who knows silk from cotton until he has touched its texture? Who knows a rose from a jasmine until he has smelled its odour? Who knows sugar from salt until he has tasted it?

Hearing and speech are peculiarly involved. If we cannot distinguish certain sounds, we cannot be certain how to produce them. Each time we pronounce a word containing those sounds, we pronounce with misgiving. Teachers may work in vain on our speech, when all the time the fault lies with our hearing. Or, on the other hand, our hearing may be excellent, and we may be able to distinguish sounds accurately, but because of speech difficulty or carelessness, we produce the wrong sounds, and the listener or teacher thinks we have not heard accurately.

Habits of mind determine to a certain extent the words encountered which we will keep, or the ideas for which we seek a label. The person who has a habit of overgeneralizing, of making sweeping statements, may acquire quite a vocabulary of superlatives and abstract terms. The person whose view of the world is heavily tinged with gloom and negativism may possess a huge collection of words useful to cynicism and self-pity. The person who does very little thinking for himself will lean heavily in his use of language upon overused patterns and slogans, giving little thought to a search for the

words which will express exactly his own feeling or opinion.

Intelligence obviously makes a difference in one's reception of language. If it is accompanied by attentive observation of the environment and attentive listening to the language labels applied to the environment, it can result in quick association of the object with the language symbol and ready recall of the symbol even when the object is no longer visible. The habit of inattention and careless listening can reduce the effect of intelligence, and a brighter person having such habits may be as poor in his acquisition of language as a duller person who is attentive and careful in his sensory observations.

Health and energy operate to make the most of intelligence and good sensory equipment. Health and energy give us the readiness to acquire knowledge. Poor health and lack of energy result in poor effort to learn.

Attitudes and feelings may benefit or block learning. An attitude of curiosity provokes observation and exploration which are basic to our knowledge of the world. An attitude of defeatism causes the learner not to try. The attitude that nothing new could be worth learning closes the gate to further knowledge.

The habit of doing everything as well as we know how to do it brings rewards in language as it does in any endeavour which is possible of achievement. The habit of learning in a way (by a system) that we have found effective for us is good, not only because we have selected it but because we believe in it and support it with our zeal. The habit of seeking help or seeking solutions for ourselves yields success when the habit of weeping, ignoring, or raging in the face of difficulty would mean failure. So, emotional patterns and work habits affect the success of the learner of a language.

Special interests which we currently have or, which are persistent with us channel our observations and our

consequent development of language to record and describe them. Certain basic needs may determine some of these interests. Interest in sports may be viewed as initially and partly a desire to explore and take delight in our increasing physical power and control. Interest in choral singing may be an outcome of the desire to be a part of a group as well as a desire to express. Interest in the care of animals may be prompted partly by the desire to express affection, partly by the very practical matter of having milk to drink or fuel to burn. To the extent that the teacher deals with language learnings connected with the learner's special interests, the learner gives greater attention.

In discussing the involvement of the whole person in language, we should not fail to mention the habit of using language. The person who practises language is likely to be more facile in it than the person who is taciturn. A good question for the teacher to ask is, 'Who is getting the practice in using language?' Is it the teacher? Is it one pupil who does all the talking? Or is the opportunity to talk passed around? Is practice sometimes given by having children talk in pairs to each other, or in small groups which the teacher visits?

Certain words, certain expressions are magnetic or repulsive because the whole person is involved. Derogatory nicknames and aphorisms which contain slighting references to a person's nationality, religion, culture, occupation, or sex are repulsive to the listener of that description. Perhaps he flushes, becomes angry, embarrassed. He avoids the words in his own speech, avoids the speaker of such words. Or, the fighting type, he may seek the speaker out to berate him. As learners, we may have trouble in learning a word which arouses such revulsion in us, but, on the other hand, we may learn it better because of the great emotion accompanying its learning.

INDIVIDUAL DIFFERENCES IN LEARNING

Each child is unique, not only in his reception of ideas, as just indicated, but in conditions of learning. It takes him a given length of time to learn a word. It takes some other children a longer time, others a shorter time. Some children could learn the same thing at the age of three, while others must be four or five or six or even ten. A learning postponed may be learnt in a shorter time because of the greater maturity in intelligence and experience. However, in the case of language a child under the age of ten seems to be the more able learner.

The ways in which something may best be learnt are to a certain extent also an individual matter. Some children need to employ almost all of their senses in learning the form and meaning of a word: they must see it, hear it, say it, close their eyes to visualize it, and trace it. Some children must do all this many times, others a few or even only once. Some children need to employ fewer senses (for example, only seeing and hearing) for the same learning. Once the child knows how he best learns, it is well that he should follow a plan of that best method. One of the teacher's jobs is to help him to find out what his best way is.

In certain individuals there is a very good neural reason for learning difficulty. Frequently such individuals will appear to know a word today but be unable to identify it tomorrow, or perhaps despite a great deal of practice they fail to recognize it at all. If the portions of the brain which act as centres of language are injured, it may be impossible for the individual to make a connection between the symbol and the meaning. Gradually, through painstaking retraining, the person may learn his symbols. Another portion of the brain takes over the language function.

Aside from brain injury, however, there may be a

neural difficulty. Nerve impulses are sent through an unlinked chain of nerve cells. The ease with which the impulse or message is sent from one cell to another determines the ease with which the person makes a connection between symbol and meaning. Some reading clinicians, in consultation with physicians and neurologists, have administered drugs which have apparently improved the ease of learning. Overstimulated children have sometimes been aided by sedation. Nervous children prone to distracted attention have been helped by vitamin B¹². Lethargic children low in thyroid have been benefitted by doses of thyroid.

The problem of learning which the brain presents is the problem of making the required connection among the many possible connections which offer themselves. Someone has likened a nerve cell to a sticky egg packed in wet excelsior.* All sorts of connections and directions through the strands of excelsior are possible. The teacher and learner are set to make one path so frequently and impressively travelled that the symbol will always produce the meaning.

In studies of success in learning to read, one of the most potent contributors to that success has appeared to be experiences in observing, naming and discussing many things. Some children come to school having experienced and discussed many things with their elders and with their neighbours. Other children have had less or little of this experience. Since a known subject-matter and a knowledge of spoken symbols are essential for reading, children who possess these in less degree than other children meet the task of learning to read at distinct disadvantage. Similarly, as children progress through school, those who have learnt less well the bases for further learning are at a disadvantage when the teacher attempts to guide the class through a new learn-

* The reference is to soft shavings of wood used for stuffing.

ing. Unless the teacher knows the background which children bring to the learning, he cannot know where to start.

The degree of familiarity the children have with learning processes is another respect in which children vary. Some children not only have been taught but have learnt how they have been taught, so that they can use the same procedures independently or under minimal guidance. Others looking at the words *yahaan* and *kahaan* may only observe that one is *yahaan* and the other *kahaan*. Another child may be able to say, 'Haan is in both words'. (comparison) 'One begins with *ya* and the other begins with *ka*' (contrast) 'If you take the *ya* out of *yahaan* and put *ka*, you get *kahaan*'. (substitution) 'If you know two words and see a part in both that you know, you can figure out what the other parts say' (generalization) The second child is equipped to learn new things even when the teacher is not working with him. So, it is important that the teacher help children not only to learn but to know how to learn. Sometimes the teacher seats a child who knows how to learn beside a child who does not, and has them work together; the latter child learns techniques from the former.

The quality and length of attention a child can give to a task are two other respects in which children vary. Young children tend to have a shorter attention span than older children, and are easily distracted by noises and activities. But even among young children there is variation in the length of time they can watch or listen, and the devotion they give to this activity. There are physical and psychological reasons for this variation, but training makes a great deal of difference. Children who have been read to in their homes before they enter school, seem to have the advantage of experience.

Studies of sex differences in learning language show that there are variations among girls and variations

among boys, and that in some cultural groups the average girl is more advanced than the boy, whereas in others the average boy is more advanced than the girl. In societies which give the girls and boys apparently equal advantages in education at home and at school, the girls seem to do as well as the boys or better in measured language growth (speech sound, word meaning, breadth and depth of vocabulary, sentence length and complexity, reading skill). When a Japanese educator was asked why girls in his school system averaged higher in reading tests than the boys, he answered, 'Girls try harder'. The truth is probably not so simple as partisans would like it to be. In any case, sex differences in learning language are not so great that girls and boys should be taught separately, or boys later than girls, or the reverse. There is too much variation among boys and among girls to warrant this. Differences are great enough among children that some boys and girls who are less developed in language should be taught separately from the boys and girls who are more advanced.

The will to learn varies among children. Some children come from home 'jet-propelled' to learn. Health and intelligence doubtless play a part. The family's respect for the opportunity of schooling is a potent factor. Sometimes the child himself sees education as the way to emerge from the famine and hardship that are the lot of the unskilled. Someone has told him, or he has arrived at the conclusion himself. On the other hand, some children come to school by family edict or by some other compulsion and against their own desires. They tolerate school or see no point to it. Perhaps at home they are pampered, while at school they are expected to work. Educators who have observed the 'will to learn' in pupils of various nationalities suspect that the future belongs not necessarily to the country which is most advanced but to the country whose

students are most eager for knowledge and for the development of their own powers.

HOW LEARNING TAKES PLACE

Since the beginning of the twentieth century psychologists have contributed much that is helpful to the language teacher as well as to teachers of other subjects.¹ The attempt here will be simply to remind the reader of the relevancy of certain findings to language learning.

One of the greatest boosts to efficiency for the language teacher was Thorndike's discovery that practice, in and of itself, does not make perfect. Practice with knowledge of error reduces the error. Dewey made a further contribution with the idea that a child's will and interest, operating in a task to which he sees the point or purpose, produces more effective learning. Exercise on nonsense words is less effective learning. Exercise on nonsense words is less effective than exercise on meaningful words. Recent experiments by Bruner and others have shown that a child remembers better what he has discovered himself, less well what he has been told. The child who uses what he has learnt remembers it better than the child who does not use it.

A way of looking at these findings is to consider them as a matter of attention. The child has to look and listen carefully if he is to make his own discoveries (such as that *यहाँ* and *कहाँ* have a common part). If the teacher tells him, he may or may not be paying attention or really understanding, and he may not see the utility in the knowledge. When he is learning something that has meaning for him, he is more interested in it and is paying better attention to it. When he knows that the teacher will require him to use what he has

1. McDonald, F.J., 'The Influence of Learning Theories on Education' in N.S.S.E. *Theories of Learning*, Sixty-third Year book, Part I, University of Chicago Press, 1964, Chap. I.

learnt, he pays better attention than when he thinks that something missed here or there does not matter. When he does use what he has learnt, for a purpose in which he sees value, he 'invests himself' in the task. When he himself has to evaluate what he has done, comparing it with a model, he has to note the details carefully in order to find the error. When he practices the task again to eliminate the error, he knows the reason and the direction of his endeavour, and he knows that the length of practice will be less if he can achieve the perfection sooner. All of these conditions increase the efficiency of the learner.

Attention fades when fatigue sets in, and fatigue is less of a threat when variety of activity is provided. A teacher seeing flagging interest changes his approach and regains attention. Attention fades when the children are not sufficiently involved. The teacher thinks of ways of getting them to participate: to answer questions, to indicate that they know, to help with a presentation of material or with demonstrating, to practise with each other. Sometimes an interval of physical exercise, nourishment, or rest is productive of better learning thereafter. At one time it was thought that efficient learning could take place only the first thing in the morning, but this is not entirely true. In fact, some language students find that study just before bed-time pays good dividends.

Programed learning has been interesting to psychologists for several decades. Pressey was one of the early experimenters with careful programming. Since that time, others, such as Skinner¹ and Crowder, have kept educators interested in the development of materials so carefully graded that the pupil can proceed through them without a teacher. Whether in workbook form,

1. Skinner, B.F., 'The Programming of Verbal Knowledge' in *Automatic Teaching: The State of the Art* (edited by Galanter, Eugene) Wiley, 1959, pp. 63-68.

textbook form, or in a machine, the programme is so designed that at each step, the student must commit himself to a choice of answers, and will, at the turn of a page or grind of the machine, discover whether he is right or not. The immediacy of knowledge of error or correctness seems to be a great factor in the success of this type of learning.

Cowder¹ developed a branching type of programming. If the student made an error, he was signalled to go back to certain materials for review. If his error was of another kind, he was directed to another area of review. If he was correct, he proceeded to the next task.

Whether or not India has the paper and the machinery and storage space for programmed materials of the type described, the learning principles are worthy of note. The learner should know immediately whether he is right or wrong. If he cannot do a task, he should be given a review of the learnings which have failed him. Or, to put it in another way, if the teacher knows what the requirements of a task are and can measure the student's preparation in these requirements, he can provide the needed exercise before the student attempts something in which he is clearly marked for failure.

Many teachers keep daily or weekly records of test scores, and give the pupil a final grade based upon an average of these scores. Experiments in programmed learning show that giving the right answer is not always an assurance that the student has learnt. Sometimes the pupil who gives the wrong answer and learns why, how, and that he is wrong, learns better than the pupil who had initially the higher score. Programmers say it is the final ability to use the learning, not the vicissitudes of the way, that is the preferable measure.

1. Crowder, N. A., 'Automatic Tutoring by Intrinsic Programming' in *Teaching Machine and Programmed Learning: A Source Book* (edited by Lumsdaine, A. A. and Glaser, S.) P. C., N. E. A., 1960, pp. 286-298.

One set of psychological principles attributed to Thorndike is that learnings which belong together should be taught together, and those which are not associated should be kept apart. In keeping with these ideas, some language teachers teach words of like form or closely comparable meaning together, for example, **लेना, लाना, भेजना**. Speech therapists, on the other hand, employ these same principles wisely. They establish each form separately before introducing another. When each has been well established separately, they are brought together for comparison and contrast. Confusion is thus avoided, and association is used when learnings are well enough established to make it profitable.

Few learnings are so well established that they will last forever without use. What will you be able to remember at the age of eighty that you have not been reminded of since you were ten? Some things, perhaps, that involved high emotion (fear, delight, pain) or that were 'over-learnt' to a great extent. But, in general, the retention of learnings requires use at frequent intervals and in different situations. Vocabulary that is to be retained must be used. Skills of getting the meaning out of what is read must be exercised if meaningful reading is to become a well-established habit.

SUMMARY

A few key facts about the nature of the learner are impressive to the teacher of language:

The child

- learns language in situations and by methods which command his full attention;
- must encounter words, sounds, and sentence patterns in many situations before he can be said to have learnt them;

- must have reason to use them if they are to be retained;
- may best start learning a language under the age of ten;
- learns by immediate correction or knowledge of error;
- learns by practice with knowledge of error;
- brings all of his experience, his health and energy, his senses, habits, attitudes, feelings, interests, basic needs to the task;
- learns like other human beings but has special problems and advantages as an individual;
- benefits by knowing not only what he has learnt, but how he can learn;
- must be equipped in the requirements for the task if he is to succeed;
- must have the will to learn.

These are some of the major learning considerations which language teachers must recognize in choosing materials and planning sequences and programmes in language.

THE READING PROCESS

TO MANY people, reading is a simple thing. All you have to do read, they say, is to learn the sounds of the letters and say them, one after the other as they occur in words and sentences. That, according to them, is 'reading'. But this is a 'lay' opinion, the opinion of the 'the man in the street'. He has learnt a little and

thinks he knows all.

The teacher of language must know more than the man in the street. He must know that reading is a process, not a simple step but many steps, all of which must be taken if the man looking at the page of print has truly read. Linguists, physiologists, psychologists, and neurologists have given information on these steps, and educators have tried to state this technical information in simple terms. Dr. William S. Gray of the University of Chicago, a man who spent his life studying the reading process, a man whom UNESCO chose to study the methods used in teaching major world languages, has detailed these steps in a diagram which cannot be reproduced here.¹ The contents, however, are roughly as follows:

- (1) Here is the book on which words and sentences are printed.
- (2) The eyes of the reader receive the impression of the print, observing the writing (from left to right, in the case of Hindi) making a series of stops along the line of print.
- (3) The message is sent to the brain.
- (4) If the reader has seen the word many times, the sound and meaning of the word 'come to him' immediately. (This is known as a 'sight word'.) If the reader does not recognize the word 'at sight', he has to 'figure the word out' by one or more ways the teacher has taught him or he has discovered for himself.
- (5) As the words in a sentence, one by one, are recognized, the reader builds the meaning of the whole sentence. Meanings are modified as words are added, and familiarity with spoken sentences helps the reader decide the relationships of words within the sentence. The same

1. Robinson, H. M., *Sequential Development of Reading Abilities*, University of Chicago Press, 1960.

- is true of sentences added to sentences, and paragraphs to paragraphs.
- (6) After the reader has decided what the sentence says ('Crows are never whiter for washing', means 'you can't change the colour of crows by washing'), he tests the meaning against his experience. Does it have a larger meaning, a 'figurative' meaning? Is it true? Does it agree with other experiences? Is it opinion or fact?
 - (7) The reader responds emotionally to the idea he believes the author intends. He agrees or disagrees, partly or fully. He resents, applauds, grieves, laughs inwardly.
 - (8) The reader selects what he thinks worth keeping and fits it in with the ideas he has met and kept before. Perhaps he discards one idea and puts the new one in its place, adds or alters. He is now ready to use this idea along with others in his mind when the occasion arises. In the case of 'Crows are never whiter for washing', he may be reminded of it when a man who has sworn that he will lie no more, keeps on lying, or a boy who has always been lazy fails to profit by an expensive education.

The steps described in the paragraphs above are summarized by Gray as Word Perception (Steps 1-4), Comprehension (Step 5), Reaction to What Is Read (Steps 6 and 7), and Fusion of New Ideas and Old (Step 8). However, Dr. Gray has outlined each one of these four areas in great detail. The serious student of reading would do well to study the original article in the monograph referred to earlier.

Many people have tried to define 'reading', but their attempts have usually failed. A definition should clarify an idea. People who have tried to do justice to all the steps in the process of reading have produced a very

long and complex statement, in some cases using technical words which few people understand. People who have tried to express the idea simply have oversimplified. For example, to say that reading is deciphering print is to exclude many other steps beyond this early one. To say that reading is thinking is to ignore much that is linguistic and physiological about it.

It is important that teachers of language realize the many ways in which they must help their pupils in the many-faceted process of reading. How can they help the pupil observe words and sentences from left to right (in the case of Hindi), recognize a word 'at sight', solve unrecognized words, gather the full meaning of a sentence or paragraph as he 'collects' the words, think what the author means by what he has written, evaluate the author's message, react to the message with his own feelings and thoughts, select the parts worth remembering, and fit them into the patterns of his past experience?

BEGINNING READING

IT is common experience with almost every school teacher that many children fail to make satisfactory progress in reading, which is, without doubt, one of the most important abilities to be acquired by the child. We are aware that retardation in reading may seriously affect the personality development of a child. We

also know that much of anti-social behaviour can be traced to the humiliating effect caused by the failure of children to make adequate progress in reading. There is no empirical evidence in our country to prove that the major reason for the drop-outs, particularly at the primary school level, is the fact that pupils' reading ability is very poor. But experience tells us that a poor reader is almost sure to repeat grades and that successive failures on the part of the child result in frustration and compel him to leave school.

Whatever has been said above warrants that we should understand the meaning of reading.

Broadly speaking, reading comprises three constituents:

- (1) Quick and accurate recognition of the printed symbol;
- (2) Adequate understanding of the author's meaning;
- (3) Use of the attained understanding, e.g., to apply, to appreciate or to evaluate what is being read.

This view emphasizes that reading does not mean the mechanical reading of the printed symbol but the process of gaining in power to get at the meaning. What is more, even in the stages of beginning reading, it is important to develop thinking. But one thing that is true is that all children do not begin reading with the same physical, mental and emotional make-up. There are individual differences among school beginners and they encounter different kinds of difficulties in learning to read.

INDIVIDUAL DIFFERENCES AMONG CHILDREN IN BEGINNING READING

Research studies have shown that many of the reading difficulties of children in any class can be traced to what happened at the time of school entrance and

in the early months of class I. In India the age at which the child enters class I and begins reading is about six. Although a majority of children beginning school come from this particular age-group, yet owing to the different rates of development caused by the interaction of maturational and environmental factors, they evince a wide range of mental development and react in varying ways to the demands made upon them by this new experience. Some beginners seem to be ready to start reading, whereas others show distinct signs of deficiency. The study made by Fallon shows that in some school districts in America as many as 25 per cent of the children are not ready to begin reading when they enter the first grade.¹ From her research Hildreth concludes that this estimate should be about 40 per cent.² Orme discovered that about three-fourths of the pupils in her group were not ready to start reading.³ Reference may be made here to the study carried out by the National Foundation for Educational Research of Britain in 60 primary schools in Kent. This study showed the differences in the needs of the newcomers from school to school. Of the 60 schools, 55 were introducing reading to most of the children for the first time, but in the other five most of the children had already been introduced to reading by their parents, were familiar with books and had mastered the mechanics of reading.

This seems to be a universal problem. It would be useful to know the proportion of school beginners in our country who are not ready to start reading at the time of school entrance. It is also necessary to

1. Fallon, M.E., 'The Pre-reading Programme', *Chicago School Journal*, 1939, pp. 10-12.

2. Hildreth, *Readiness for School Beginners*, Harcourt Brace, New York, 1950.

3. Orme, L., 'Building Readiness in the First Grade Children through Special Instruction', *The National Elementary Principal* 35, 1955, pp. 43-46.

study the physical, mental and emotional make-up of the child when he begins reading, or, in other words, it is essential to note how far the child is fit in those factors which are related to the beginning of reading.

SOME IMPORTANT FACTORS RELATED TO BEGINNING READING

From birth on, the necessary background for success in learning to read is built up through a combination of inner maturation and learning. When the child reaches a stage that we call a stage of general maturity, he is ready to begin reading and learn it without much difficulty. Several factors are related to beginning reading. Some of the most important that have so far been identified are age, intelligence, sex, visual and auditory perception, physical fitness, background experience and language facility, personal and social adjustment, and interest. A word about each of these factors would not be out of place here.

AGE

In our primary schools the sole criterion for entrance to class I is the age of the child. In fact all the children are not ready to read at the age of six, the recognized age of entrance to the school in our country. It is true that the older the child when he enters school, the better prepared he is to make a personal adjustment to the school situation. But we should not take chronological age as the indicator for beginning reading. Chronological age is a convenient but an inaccurate way of determining when the child is to begin reading.

INTELLIGENCE

The level of general intelligence appears to be a significant determinant of reading success. A number

of studies have shown that mental test scores and early success in reading have co-efficients of correlation ranging from about .40 to about .55, depending on the test used. Some think that a mental age (M.A.) of 6.5 years is necessary for beginning reading and, therefore, reading instruction should be delayed for any given child until he has reached that mental age. There is also evidence to show that many children of mental ages of less than 6.5 years can be taught to read. Perhaps much depends upon the proper handling of the youngsters. As Gates¹ points out, the important thing is probably not the mental test score of the child but the type of educational programme in which he is participating. In the study made by Gates, children of mental ages of about five years had reasonable success in reading where skilful teachers provided with a considerable amount of reading material gave individual attention to the pupils.¹

SEX

Girls mature earlier than boys in many aspects of growth. It is common experience that girls begin to talk somewhat earlier than boys and through childhood tend to have larger vocabularies. There is also evidence that girls show lesser signs of reading disability than boys.² From the results of the various studies done in the West we can infer that more boys than girls are not ready to read when they enter the school. No study has been conducted in our country regarding sex differences in reading.

1. Gates, A. I., 'The Necessary Mental Age for Beginning Reading', *Elementary School Journal* 37, March, 1937, pp. 497-508.

2. McCarthy, D., 'Some Possible Explanations of Sex Differences in Language Development of Children' in *Manual of Child Psychology*, Wiley, New York, 1954.

VISUAL AND AUDITORY PERCEPTION

Perhaps reading is one of those activities in which the child is engaged which demands the highest degree of visual discrimination. When the child starts reading he does so by perceiving some kind of shape or pattern which constitutes the printed letter or word. It is, therefore, necessary that some practice should be given to school beginners in seeking similarities and differences in pictorial and word configuration. For example, they may be asked to discriminate between word symbols like घर, पर, कर etc. Reading readiness books in English contain exercises to develop this ability.

The tendency to make reversal errors appears to be the most prominent perceptual tendency among immature youngsters. To such youngsters त and त are the same or बस and सब. They often confuse ३ with ६. These children make very slow progress in reading unless some careful measures are taken to help them with this problem.

Several studies have been conducted in the U.S.A. to show the relationship between reading ability and visual perception. Among them the study¹ made by Goins is particularly useful here. She studied visual perceptual abilities in relation to early progress in reading, among pupils of class I. On the basis of correlations she concluded that visual perception as measured by her tests is related to reading progress in class I. She further concluded that visual perception is more important in the early stages of learning to read than in the later stages.

Auditory perception is another factor of vital importance in reading. Accuracy in hearing helps in identifying sounds and develops the capacity to asso-

1. Goins, J.T., 'Visual Perceptual Abilities and Early Reading Progress', *Supplementary Educational Monograph 37*, University of Chicago Press, Chicago, 1958.

ciate sound with symbol and meaning. It helps in understanding the meaning of the word in a particular context.

Studies have revealed that many youngsters are not able to discriminate between different sounds, which is essential for learning to read. Deficiency in auditory discrimination often results in the persistence of infantile pronunciation. This may be one of the reasons why some children above six years of age pronounce बस as बश. There is confusion between the स and श sounds. Examples of this kind can be multiplied. It is necessary that in the reading programme of school beginners some exercises should be included which may be helpful in building auditory discrimination.

PHYSICAL FITNESS

The physical health of the child plays an important role in his learning to read. A healthy child finds it easier to learn reading than the unhealthy child.

Poor vision and poor hearing also interfere with reading. Physical maturity of the child has a high correlation with his reading ability. Olson and Hughes¹ conclude from their studies that the physical maturity of the child, which is indicated by his weight, height and skeletal development, has a high correlation with his reading readiness. There is also some evidence that left-handed children face some difficulties in reading, though this is one of the controversial points in discussions on reading.

BACKGROUND OF EXPERIENCE AND LANGUAGE

Meaningful experiences facilitate the child's learning of reading. Researches have shown that many

1. Olson, W.H. and Hughes, B.O., 'The concept of Organic Age', *Journal of Educational Research* 35, 1942, pp. 525-527.

linguistically handicapped children reveal a lack of meaningful experiences. An experimental study made by Helen Dawe illustrates this point very well.¹ Two groups of pre-school and kindergarten children from an orphanage were matched for chronological age, mental age, I.Q., vocabulary score, general science score, and organization score. The control group was given the usual care in pre-school and kindergarten. The experimental group was given training in the understanding of words and concepts and experience in looking at and discussing pictures, listening to poems and stories, and going on short excursions. New words and phrases were introduced and explained. The experimenter attempted to stimulate curiosity and encourage critical thinking. The aim was to promote real comprehension of words and concepts. Retests at the close of the training period revealed that the experimental group had gained significantly in I.Q., while the mean change for the control group was a loss of two I.Q. points. The experimental group had made significantly greater gains than the control group in vocabulary, home-living information, and science information and were significantly superior on a test of reading readiness.

Generally children from well-to-do homes get favourable opportunities for better linguistic development which is an aid in reading. However, this does not mean that all children from wealthy homes have opportunities for gaining experience. It is a matter of common knowledge that at times children from wealthy homes are so sheltered as to be quite retarded when they enter school. In fact, for the language development of the child the wealth of the home is not so important as the intellectual stimulation and the social atmosphere

1. Dawe, H. C., 'Environmental Influence on Language Growth' in *Psychological Studies of Human Development* (edited by Kuhlén, R.G. and Thompson, G. E., Century Psychology Series) New York, 1952, pp. 224-229.

of the home. For beginning reading it seems essential that the child should possess

- (1) a good command over spoken vocabulary and
- (2) a mastery over sentence structure.

These aspects are mainly dependent upon the intelligence of the child and his home background.

PERSONAL AND SOCIAL ADJUSTMENT

Every teacher knows that some school beginners are quite cheerful, confident, stable and self-reliant. They participate in school activities willingly and cheerfully. This personal and social adjustment is an aid to these children in reading. On the contrary, some school beginners are relatively less cheerful and less confident. They look shy and timid. They are afraid of taking part in school activities. It is these children who face a lot of problems in reading. Personal and social adjustment is absolutely necessary in reading.

The three aspects of personal and social adjustment which are necessary for beginning reading are:

- (1) Emotional stability
- (2) Self-reliance
- (3) Active and cooperative participation in group activities.

INTEREST

It is very difficult to make a child learn to read unless he has a desire to read. Some techniques should be used to arouse interest among youngsters to read. Story-telling and looking through picture-books, appear to work well in this direction.

EVALUATION OF BEGINNING READING

As has been pointed out earlier, beginning reading demands competence in several skills and abilities such

as auditory perception, muscular coordination and motor skills as well as linguistic attainment. The progress made by the child in developing these skills depends upon many factors, such as his age, sex, general intelligence, physical health and maturity, background experience, social adjustment, emotional stability and home background. There is no one tool which gives data on all these factors. Some of these can be measured by standardized tests, some can be judged by observation of the behaviour of the child and some can be judged from information obtained from the child's family. The teacher can appraise the auditory, visual and health factors. Help can also be obtained from the health service of the school, if there is any. The teacher's appraisal should also include the child's background of understanding, command of vocabulary, accuracy of speech, desire to read, participation in school activities and the ability to follow directions.

Besides these, the use of reading readiness tests is helpful to some degree. With this end in view, the National Council of Educational Research and Training has undertaken the standardization of the N.I.E. Reading Readiness Tests. A brief discussion of this test follows.

THE N.I.E. READING READINESS TEST

The N.I.E. Reading Readiness Test is intended to discover to what extent children are equipped to start reading. It is also hoped that the test will help in the determination of the difficulties of school beginners in starting reading, so that necessary help may be given to them in building up their readiness for this new activity. To start with, the test has been constructed for the Delhi State only.

The test material is devised to measure the following *two main objectives of reading readiness*:

- (1) Skill in the mechanics of reading

(2) Skill in reading comprehension

Since it was necessary to estimate children's background knowledge in Hindi for preparing suitable test items for them, a representative sample of about 100 children expecting to seek admission in class I in July, 1963 was selected and these children were interviewed. The interview included some questions designed to identify their knowledge of the names of familiar objects and actions. A few questions were also included to discover children's experience of daily life. The responses of the children were recorded under the following heads:

- What different names of objects do children know?
- What different types of information do they possess about things of daily experience?
- What different functional words are they familiar with?
- What types of sentences do they speak?

The responses of the children were analyzed under the same heads as given above. The words falling within the range of the 20th and 80th percentiles were accepted for preparing the illustrations of test items.

On the basis of the selected words the pilot tests of Reading Readiness were prepared. These tests consisted of the following nine sub-tests:

- (1) Word Meaning Test
- (2) Information Test
- (3) Sentence Test
- (4) Figure-form Comparison Test
- (5) Word-form Comparison Test
- (6) Number Test
- (7) Copying Test
- (8) Picture Direction Test
- (9) Auditory Discrimination Test

These tests were administered to a representative sample of 400 school entrants of Delhi Schools. The dis-

criminating value and the difficulty value of each item of the different tests were calculated. The reliability of each sub-test was determined. Intercorrelations between the different sub-tests were also calculated. It was found that all these subtests were highly reliable.

The final tests were prepared on the basis of the difficulty value and the discriminating value of the different items and also on the basis of the intercorrelations of the different tests. The final tests included only five sub-tests:

- (1) Word-meaning Test
- (2) Sentence-meaning Test
- (3) Copying Test
- (4) Visual Perception (Parts I and II)
- (5) Auditory Discrimination (Beginning and Ending sounds)

- (1) *Word-meaning Test.* This test is meant to measure the ability of the child to identify objects within the range of his experience. In this test some such items have also been included as measure the child's knowledge of the various aspects of number, like the concepts of wide, big, etc.
- (2) *Sentence-meaning Test.* This test is intended to measure the vocabulary of the child with reference to his understanding of the functions of concepts pictured in real-life situations. It is also intended to measure the child's ability to comprehend complete sentences illustrated through pictures.
- (3) *Copying Test.* This test has been devised to measure skills that are a combination of visual perception and motor control.
- (4) *Visual Perception Test.* This test is devised to measure the child's ability to see similarities and differences between various geometric forms, letter forms, word forms, number forms,

- etc. These forms range from simple to complex requiring greater discrimination of details.
- (5) *Auditory Discrimination Test* The purpose of this test is to measure the child's ability to discriminate among Hindi sounds.

These final tests have already been administered to a representative sample of 3500 school beginners of Delhi schools and are under the process of standardization. It is hoped that in the near future these tests may be adapted for those States where Hindi is the mother-tongue.

WHAT AFTER EVALUATION ?

It is hardly possible that the results of readiness tests and teacher-appraisals can perfectly predict a child's success in beginning to read. But these tools are helpful for the teacher in detecting in which factors of beginning reading the child is weak, so that he can plan a programme to make up this deficiency. But the problem is that some children are relatively poor in some of the factors, whereas others are low in some other factors. This wide range of individual differences makes the group programme for beginning reading very difficult. But, on the other hand, in a class of 40 children all of whom have unique patterns of strengths and weaknesses it is impossible to work with each child individually as much as it is to be desired. The teacher can form instructional groups, grouping together the children who need somewhat similar instruction. But he should also adapt his teaching in such a manner that he may be able to meet pupils' individual needs. He should carefully weigh the facts about each individual child and should plan to help him to develop those abilities which are essential for beginning reading.

Let us take the example of a child who has an average mental age and who appears to be physically sound, but who shows signs of retardation in background experi-

ence and knowledge of words. The best that the teacher can do for such a child is to give him more opportunity to build general background and more help in listening to and saying words. He can take the help of pictures for introducing new concepts. He can ask the child to list all the words of one type he knows. Since vocabulary normally develops out of rich, varied experiences the teachers should try to provide the child with rich experiences in the classroom.

Suppose a second child seems to be advanced in comparison with the class as a whole in such things as background experience, mental age, emotional stability, etc., but appears to be relatively poor in visual discrimination. This ability can be improved by giving the child an opportunity to practise in clay-modelling, drawing, and cutting around outlines. He may be introduced to the game of assembling picture puzzles. He may also be given exercises for noting visual similarities and differences, such as those used in the reading readiness test. If the teacher finds that the child is very poor in visual discrimination, reading in his case may be delayed.

Take the case of a third child who scores high on readiness and mental tests but is shy, timid, self-conscious, sensitive and nervous. This is the case of a child who is emotionally unstable. The teacher should not rush such a child into group activities. More time should be given to him to get used to school. The teacher should show warmth, appreciation and affection for such a child. He should try to remove the cause of his nervousness.

Such examples can be multiplied. Some excellent suggestions to teachers of primary schools for developing reading readiness have been given in various standard books on reading. The teacher can follow some of these suggestions for developing the readiness of the children. He can also make use of some readiness workbooks for this purpose. Unfortunately in our country readiness workbooks are not available and some educational agen-

cies have to start this work. Still perhaps no other person can do this work better than school teachers who are involved in the teaching of reading to the young and who are acquainted with their real needs.

Beginning reading has an important place in the educational development of the child. If a child is properly corrected at this stage for any deficiency in those abilities or factors which are related to beginning reading, he may be saved from encountering numerous difficulties in reading in the upper classes. The teacher should remember that 'a stitch in time saves nine'.

DEVELOPING READING READINESS

THE PREPARATORY period for reading is considered as the period of growth in the total reading development of the child. Schools have a definite responsibility to provide programmes in class I designed to develop readiness for reading.

vide programmes in class I designed to develop readiness for reading.

The child should be helped to get adjusted to the

school situation before he can prepare himself for any serious learning activity. If a wide gap exists between the child's home background and the school, the transition may be very difficult for the child. This gap is even wider in the schools in India where the majority of the children do not go to nursery or kindergarten schools, for experience in nursery and kindergarten schools smooths this transition. A child who is worried all the time about when he can go home, who is afraid of talking to his teacher as well as others in his class, who is restless and talks all the time and cannot listen when others talk, cannot concentrate very well on learning such a complex task as reading.

To help the child to learn to work and play with his teacher and with a group of children of his age, to follow directions and school routine without immediate adult supervision, the teacher should provide experiences, especially in the first few weeks of school, for the child to learn to work with small groups and later with larger groups. Small group activities, singing games and action songs, story-telling, reading a story, showing pictures and telling stories from 'experience-charts' are excellent group activities. These activities should only last for a few minutes at a time.

DEVELOPING CONCEPTS

Providing for a wealth of experience related to the interests of the pupil and thereby broadening his field of meaningful concepts, is one of the most important instructional jobs in any reading readiness programmes. Printed symbols have significance for the learner to the degree that they stand for things within his experience. It is through his experiences that the child is enabled to

1. Experience-charts are developed by teachers. They record any group activities undertaken by the class, such as, making a garden, going on a trip to a zoo or a fair, etc., and are based on the oral expression of pupils.

understand the stories and other materials he reads. This helps the child to understand the meaning of what he reads and also gives him the idea that one reads to get the meaning.

Meaningful concepts aid not only in interpreting symbols but also in fixing the memory of printed symbols so that recognition is helped whenever the word is seen again. Again, meaningful concepts help the child to recognize new words through context. For example, if a child comes upon the following sentence *The farmer ploughs the land with the plough* and does not know the word *plough*, the other words in the sentence give him the clue to this particular word, if he has had the experience of seeing a farmer at work. The teacher should carefully examine the books she will be using to teach reading to discover the concepts included in them, and in the light of her knowledge of the background of her pupils she should determine whether each of these concepts is sufficiently familiar to the pupils.

Experiences for acquiring meaningful concepts must be varied, real and important. The selection of experiences must be based on the importance of those experiences in terms of life values.¹ They should not be limited to customs and convenience. Neither should the experiences be limited to the existing interests of children. Broadening their interests and building more and more concepts should be the aim of the teacher, for many children coming from meagre backgrounds have interests in only very few things. It is the duty of the teacher to arrange for the widening of their experiences. The teacher should see that the experiences provided have immediate as well as future value and are within their comprehension. Pictures² are very useful in helping the children to associate

1. Harrison, M. L., *Reading Readiness*, Houghton Mifflin, Boston 1939, p. 36.

2. Lamoreaux, L. A. and Lee, D. M., *Learning to Read through Experience*, Appleton-Century, New York, 1943, p. 7.

meaning with the spoken word. The larger their number of experiences, the broader their background for interpretation. Constructive activities like making a flower garden or planting vegetables, excursions and trips to post offices, farms, social activities like dramatizing, and other practical activities like churning butter, taking care of pets, and games are activities that provide interesting experiences for children. Any first-hand experience is very important in clarifying and building such concepts as they will meet in their reading.

TRAINING IN READING

Since 'reading is reasoning', training in the ability to do problematic thinking should be another important part of the reading readiness programme. Even in the very beginning stage, the child should be trained to think, to question, to compare and relate his past experience, to select relevant ideas, to organize ideas, to make judgments and to draw conclusions.

The following suggestions might be helpful in developing the ability to do problematic thinking¹:

(1) Give children thought-provoking questions on their own level of maturity to work out for themselves. For example, what would you have done if you were the little boy in the story? or, do you think that Ram was right in doing so? or, why do you think he was right (or wrong)?

(2) Question children about the reasons for incidents or natural phenomena. For example, How does a little chicken grow in the egg? Where does the milk come from? How do you make butter from the cream?

(3) Help the child to think through the little problems which daily confront him. The child who cannot often recognize or correctly define these prob-

1. Harrison, H. L., *op. cit.*, p. 50.

lems particularly needs this training. He will need help along these lines as well as in solving the problems. For example, What kind of conduct is needed to establish the happiness and comfort of all in the room? or, How can you make a toy which is real and durable and attractive?

(4) Encourage children to draw their own conclusions and make their observations from their experiences. For example, provide unreal pictures like a lamb climbing, or a dog riding a bicycle and ask them whether there is anything unusual about them. Or, give them pictures of objects in a mixed order, like pictures of vegetables with those of flowers in the same column and ask them to classify.

(5) Meet the child's 'why' with a 'Why do you think so?' if he has a basis for reasoning and then help him to a solution.

(6) Success brings confidence. Help the child to evaluate his plans, work, conduct, habits, etc.

DEVELOPING LANGUAGE ABILITY

It is with the help of language that the child is able to adapt to his environment, to think, to solve problems and to systematize his knowledge. It is the basic equipment for social communication and it also serves as a vehicle for play, for phantasy, and for emotional release. Hence, development of language skills is one of the most important aspects of the readiness programme.

Again, the fact that the great bulk of instruction takes place through the medium of language, through the pupil's reading or through his listening to others, makes it highly important that a programme for developing language ability should precede any formal teaching. Besides, there is often a wide linguistic diversity in the same spoken language. Before starting to teach,

the teacher should build a common vocabulary in order to help children understand the lessons they will be reading.

Experience shows that children who speak the language readily and have a wide speaking vocabulary usually tend to read with greater ease and fluency than those who do not. This may be one of the reasons of retardation in reading in bilingual children.¹ Confusion results when they speak their language at home and at the same time attempt to learn a different language at school, e.g., the children who speak Tamil or Telugu or Punjabi at home and have to learn everything in Hindi or English in the school. The teacher should see how many of her students speak a different language at home and provide more opportunities for learning the language used in the school by setting up experiences that are related to the child's background and which call forth free and spontaneous expression. These experiences must also be purposeful and meaningful to the children. Betts gives the following suggestions to be used in developing oral language ability², most of which could easily be tried out in our classrooms:

- (1) Conversations
- (2) Informal discussions
- (3) Telling and retelling stories
- (4) Relating anecdotes
- (5) Telling jokes
- (6) Proposing riddles
- (7) Dramatizing
- (8) Oral reports
- (9) Making announcements
- (10) Giving directions
- (11) Relaying messages

1. Hildreth, G., *Learning the Three R's*, Educational Publishers, Minneapolis, 1947, p. 37.

2. Betts, E. A., *Foundations of Reading Instruction*, American Book Co., New York, 1946, p. 308.

- (12) Telephoning
- (13) Presenting programmes
- (14) Reading or reciting poetry
- (15) Choral speaking

Developing a broad speaking vocabulary is another phase of the language development programme. Most of the activities mentioned above, in connection with the development of ability to use simple sentences, are excellent in developing vocabulary, too.

Whenever possible, vocabulary should be developed in concrete situations. The teacher can use words in informal talks so as to help the child become familiar with these words and their meanings in abstract situations. For example, to learn the word *heavy*, the teacher can show him different objects of different weights, let him handle them and then use the word in relation to the different objects in the class, and so on. The teacher can explain, discuss and illustrate the meanings of words by pictures and stories. Pictures and models in various forms offer a more direct experience. For example, many village children may not have seen a car, and in most cases it may not be possible for the teacher to show them a car. In such a situation, one good way is to show them the picture of a car and talk about the different parts. A toy car or a small model of a car may also be useful.

The teacher can call the attention of the children to synonyms, antonyms and prefixes of familiar words in a very elementary way. She can have the children express a given idea in a variety of ways and evaluate them to see which is the most adequate and original.

TRAINING IN ACCURATE ENUNCIATION AND PRONUNCIATION

This is the third phase of the language readiness programme. Inaccurate articulation may present a confusion in the sounds of words to be associated with

the printed symbols and thus affect reading directly. The child who has articulatory defects hears the word as spoken by others in one way and as spoken by himself in another way. Thus the child may develop confusion in reading both in mechanics and comprehension, which would not have been present if articulation were accurate.

To young children training in enunciation and pronunciation can be imparted most effectively through example. The teacher should take particular care in speaking to the children so that imitation may promote correct habits. Many times children mispronounce certain words because of the way they had been hearing them. Children must be helped to be good listeners in order to be good speakers. The teacher must speak distinctly enough so that there is no doubt in the pupil's mind as to what she has said.

To help the child in his articulation the teacher must first find the sounds that the child mispronounces or omits or substitutes.

The following general suggestions may be used in the classroom to develop articulation¹: help the child to carefully listen to new words with which he has difficulty; show the child the correct position of the tongue and lips to make the desired sound; give opportunities for the relaxation of speech organs, lips and tongue.

TRAINING IN VISUAL DISCRIMINATION

To do well in reading, the child must have sufficient power of visual discrimination to readily distinguish between the forms of the printed words. To promote the habit of examining words and sentences in a left-to-right progression, such skills should be developed through training in: making an accurate return

1. Barrows, T. S. and Hall, H. K., *Games and Jingles for Speech Development*, Expression Co., Boston, 1936.

sweep from the end of one line to the beginning of the next line, the habit of proceeding from the top of the page to the bottom of the page, knowledge of the difference between a word and a sentence, the ability to discriminate between the total configuration of words, the ability to use distinguishing characteristics of words to discriminate between word-forms, and the habit of verifying word-recognition responses through the use of context clues.

The following suggestions will help pupils to foster left-to-right visual progression. The teacher must make sure that the children know the meaning of 'left' and 'right.' In teaching them 'left' and 'right', care should be taken to see that the teacher is facing the same direction as the children. (Since in India we eat only with the right hand, teachers may say, for instance, that the hand we eat with is the right hand and that side is the right side.)

With every opportunity the teacher gets she should demonstrate that reading is done from left to right. When writing on the board, she may draw the attention of the pupils to the fact that writing is being made from left to right. When reading from experience charts and the blackboard, she can move the hand or the pointer from left to right under the words. Occasionally, when writing a word on the blackboard, she can sound the syllables slowly as they are written, so that the pupils can learn that both writing and pronouncing of the word move from left to right.

In viewing sequences of pictures, the children should be instructed to read from left to right in order to find out what happens next. The teacher can have pupils match words in a list when reversed spellings are used, like हरि । रहा, हार, हरि, चना । नाच, चना, नाच. She can give them word-matching exercises and teach pupils to begin at the left of each word and examine it carefully all the way through to the end in order to find

matching words, e.g., कलम । कमल, कलम.

Systematic guidance in developing habits of left to right progression in viewing picture sequences and words is highly important, for many reversal errors can be prevented by proper guidance in the pre-reading and initial reading stages. This is very important in teaching the children to read Hindi because of the nature of Hindi letters, e.g., च, य, ज; प, फ; व, ब; घ, ध. Also as a preparation for reading, the children should be taught the meanings of ऊपर-नीचे, आगे-पीछे.

Exercises for developing discrimination between word-forms should focus the child's attention on distinguishing the forms of printed words, parts of words, and letters¹. It is not necessary that the child should know how to pronounce the word or understand the meaning in order to discriminate between word-forms. But in case of children who are very retarded in this ability, practice in distinguishing large forms should precede exercises on printed words.

The configuration of the word is usually used as a clue by the children to recognize words, so practice in distinguishing between the forms of one word and another should be given in the pre-reading programme.

Practice in distinguishing between the forms of one group of letters and another group is another activity that is widely used to develop discrimination. Such exercises will help:

Marking a word in a row of words that have the same ending as a given word,

ताली । थाली, माली, बाली, ताली

Making a word in a row of words that have the same beginning letter or letters as a given word,

चाकू । चावल, चारा, चाकू, चादर

Practice in distinguishing between the forms of one

1. McKee, P., *Teaching Reading in the Elementary School*, Houghton Mifflin, Boston, 1948, p. 146.

letter and another should also be given to develop visual discrimination, e.g.,

व । व व क

Marking out in a line of print the repetitions of a letter marked out in the first word, for example,

चा । चाकु, चारा, चावल

matching two occurrences of the same letter in a group of four or more letters like द । आदमी, दवा, दया, and marking out the repetitions of a given letter in a row of letters which include letters frequently confused with the given letter, for example, फ । क, प, फ, झ are useful exercises.

The teacher should make no effort to teach the pupil to read the words or to match them by meaning during the visual discrimination exercises, for the purpose of these activities is to train him in distinguishing between the forms of words and letters. Calling attention to many other factors at the same time will divert his attention. The exercises given should be well-graded in difficulty by starting with words which are quite dissimilar and gradually proceeding to letters that are very similar. Special practice in visual discrimination should be continued through much of class I after instruction in reading itself has begun. Special practice given at this time should be limited to words and parts of words which the children confuse in the reading, and to new words that he will be reading.

The activities mentioned earlier to develop the knowledge of right and left, top and bottom, and words and letter-forms also help to prevent reversal tendencies. Writing the word sometimes helps to fix the form of the word.

DEVELOPING AUDITORY DISCRIMINATION

The ability to discriminate between speech sounds is a basic factor in readiness for reading. The results

of many studies indicate that failure to notice the basic sounds of word-elements is a major cause in reading disability.¹

The nature of the language and the method of instruction play a very important part in determining the type of training to be given in auditory discrimination. For example, a language like Hindi which has so many fine variations of the same sound क, ख, ग, घ—all variations of the sound 'क'—may require many exercises to develop the ability to discriminate these sounds. If the methods used for reading instruction emphasize sounding (the phonetic method), auditory acuity plays a larger role than in methods which are primarily visual.

Consequently, an essential part of the reading readiness programme is to train the child to develop auditory discrimination to the point where he can distinguish readily between words and sounds of parts of words. A good programme should develop awareness of word-elements in a sentence, the ability to discriminate between likenesses and differences in the sounds of words, the ability to recognize identical sounds both in initial and final sounds, the ability to pronounce, enunciate and articulate words correctly and the ability to follow directions. While teaching auditory discrimination, we must keep in mind the following principles:

Auditory discrimination exercises should be strictly oral until the child has acquired an adequate stock of words. At all times the child should hear the natural pronunciation of words.

The teacher should introduce the different variations of the same sound, like क, ख, ग, and घ through words starting with or containing these letters. A mere

1. Durrell, D.D., et. al, *Building Word Power in Primary Reading*. World Book, Boston, 1941.

Durrell, D.D. and Murphy, H., *Auditory Disability in Reading Readiness in Education*, Feb. 1958, pp. 1-28.

repetition of sounds of letters does not help children to discriminate these sounds in words, for the number of mistakes made by the children who can repeat all these sounds by heart proves that they are not connecting these sounds to the natural situations. So the best remedy for overcoming this difficulty is to present words in natural situations and show the children the differences and likenesses through words. Developmental activities for auditory discrimination should emphasize both likenesses and differences in the sounds of words. In order to emphasize left-to-right progression, likenesses and differences between the initial consonants of words should be taught first. Instruction in auditory discrimination should be differentiated in terms of individual needs.

The following sample activities may be of help in developing discrimination of sounds:

To give practice in hearing sounds the teacher may use the Tapping Game¹. The children listen while the teacher taps loudly on the blackboard and softly on the table, and very loudly on the chair. The teacher asks a child to repeat the tapping, or children close their eyes while teacher taps on different objects and asks the children to tell where she tapped.

Practice in listening to or saying mono-syllabic words that rhyme, e.g. मन, तन, वन.

Listening to one word that does not rhyme with the other words in the group like पर, कर, रात, घर.

Saying words that rhyme with चल, जल etc.

Practice in listening to endings attached to known words and saying variants of a given word, e.g. endings to the word दूध, to make other words, like दूधवाला, दूधिया

Practice in listening to and saying words which contain the most frequently recurring phonetic ele-

1. Russell, D. H. and Karp, E. E., *Reading Aids through the Grades*. Bureau of Publications, Teachers College, Columbia University, New York, 1959.

ments in the initial position, using consonants, consonant blends, short and long vowels.

DEVELOPING INTEREST IN LEARNING TO READ

A strong desire to learn to read facilitates the child's task in learning. Interest promotes desirable initial attitudes in the child and also stimulates him to give the concentrated attention required for success in early reading experiences. A lack of interest in reading is an outstanding factor in the failure of children to read widely and well. Consequently, helping the pupil to acquire this desire to learn to read is of the utmost importance in preparing children to learn to read.

Keen interest in reading naturally develops from experiences which reveal to pupils that reading contributes to their pleasure and satisfaction. The teacher may read aloud to the class frequently. Such oral reading can stimulate the child's curiosity and desire to read in order to find the facts for himself. When he hears good stories read, he can discover that it would be possible for him to get fun by reading. The teacher should take all the opportunities she gets to show the value of reading (for fun, for information, for finding answers, and the like). The materials read should be highly interesting to children.

By labelling the pictures and objects in the classroom, by putting signs, directions (such as 'put the umbrellas here') and notices, the teacher can keep the children surrounded with reading situations. An attractive library corner with interesting books will naturally draw their attention to it and develop in them a desire to read the books. Even though Indian teachers do not have many children's books, they can make story books for children by illustrating the different experiences the children have, using the *Panchatantra* tales,

writing stories of different colourful aspects of Indian life, and so on. Pictures from magazines and advertisements can be used for illustrations. Short rhymes and songs the children enjoy, such as rhymes on jasmines, butterfly, or moon, can be illustrated with pictures and hung in the classroom with the rhyme written beneath the pictures. Attractive pictures depicting simple actions like playing in the yard, fishing in the pond, and ploughing in the field, with a short description of the action written below are excellent in capturing children's attention and stimulating their desire to read.

If experience charts are developed in the class these may be read aloud to promote interest in reading. Pupils from the class above or a big brother or sister who reads well may be invited to read aloud to the class.

DEVELOPING MEMORY-SPAN

Training in keeping a series of ideas in mind to develop the memory-span of ideas also falls within the programme of preparing the child to read. This is useful in carrying the child through a story and in aiding him in the recognition of new words by context clues. It also aids him in forming the habit of rapid, fluent reading.

Here are a few suggestions to develop the memory-span of ideas in the preparatory period. The teacher should try to make the work in the classroom interesting to the child. The more interested the pupil is, the longer will he hold his attention to the task at hand. The work period or the listening period should be adjusted to the attention-span of the children and be kept short at first to be gradually increased as the children learn to hold their attention to the task at hand. The length of the listening period can be increased as the children gain powers of concentration. The teacher can train them to complete a task before starting something new.

Harrison recommends the following activities to be used by the teacher¹:

- (1) Retelling stories enjoyed by all
- * (2) Making and giving movies of familiar stories
- (3) Listing incidents in a story on the board or on the easel
- (4) Cutting out pictures from books and pasting them in correct order for a frieze
- (5) Relating steps in an experience
- (6) Remembering a series of operations in constructing or making something.
- (7) Carrying out a series of requests in the proper order.

Some games may be used to develop memory-span. One such is the adding game. One child starts a sentence, such as *I saw a dog on my way to school*, and the second repeats the sentence and adds one more object to the previous sentence, and the game continues till it gets too complicated. These help to train the child to hold a series of ideas in order or by sequence.

The various activities which the children do in the readiness programme, such as drawing, cutting, pasting, finger painting and action games, provide ample opportunities for the development of eye-hand coordination and large-and-fine muscle coordination which are essential in writing.

Before starting the formal teaching of reading the teacher must assess the abilities and lack of abilities of the pupils and provide opportunities for developing the abilities they lack. The best way to ensure success in beginning reading (as has been illustrated by innumerable studies) is to develop the tools that are essential for successful reading in a well-planned and executed readiness programme.

1. Harrison, M. L., *op. cit.*, p. 56.

* Here is a suggestion for the enthusiastic teacher: Have you ever tried improvised 'movies' for the Indian classroom?

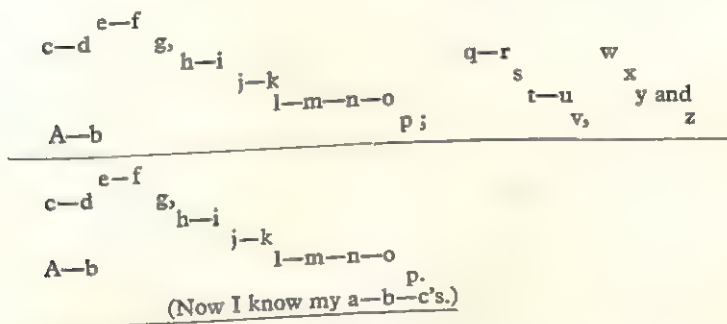
APPROACHES TO TEACHING THE READING OF A LANGUAGE

EACH OF the following ways of organizing and teaching the reading of a language has been tried in one or more countries throughout the world, with claims of great success. Yet each has had a deficiency when used as the only method of organizing a reading programme. The problem of the modern teacher is to

determine what combination of these approaches will be the most efficient and suitable for his language and his students. The teacher can find the answers to his problem only if he considers each plan in relation to the findings of research about the ways children learn and the nature of reading.

ORGANIZATION BY LETTER

Many children come to school having been taught to recite the names of letters of the alphabet. This learning is sometimes assisted by a little song which uses the letters in sequence:



Single approaches to reading through learning the letters are as follows:

(1) Resemblance of object and letter in sound and in shape

A letter is superimposed on a picture of the object whose name starts with that letter. For example, the letter b is imposed upon a picture of a ball:



This method is sometimes criticized for the lack of clarity of the letter form in this position.

(2) Resemblance of sound made by object to sound of letter

A picture of a snake or a teakettle is shown with the letters, for example. In the case of snake, the shape of the snake can be an *s* also, fulfilling the conditions of point (1) as well as (2). However, the idea here is that the snake or the teakettle makes a hissing sound which resembles the sound of the letter *s*.

(3) Letter-word linkage

A picture of an apple is shown with the letter *a* and the word apple. The child is taught to say, 'A is for apple, B is for bunny.'

(4) Oral spelling

In this the child learns to respond to letters by naming them, perhaps having been taught by point (1) or (3). Then when he sees a word, he learns to say, 'c-a-t spells cat', or 'c-a-t, cat'. This method is criticized because c-a-t never says cat when it is blended (the blended sounds of letters, not the blended names of letters, produce 'cat'). It is praised because it forces the child to observe the word carefully from left to right.

(5) Letter-sounding


In this system the child is taught to respond to letters by producing their sounds, perhaps using point (2) in learning the sounds. Then he learns to analyze words by letter-sound: 'Cuh-a-tuh, cat'. This system avoids the error in point (4), but fails in other ways.

The sound of a letter often depends upon its position. (For example, in Hindi, the word sounded अ-म-रु-द is pronounced अमरुद. In English, the letter c is sounded like k if it is followed by a or o or u, but like s if followed by i or e). Also, the vowels in English have several sounds, not just one apiece. Silent letters cause trouble in this system. The t in *often* would be sounded by this system but is actually a silent letter in this word. Also English consonants sounded alone create a blending problem. Cuh-a-tuh says cuh-a-tuh, not cat.

(6) Flash-card

This method is a matter of sheer drill. The teacher shows a card containing a single letter and either pronounces the letter or says its name. The child learns to make this same response on being shown the flash-card containing that letter. He then uses what he has learnt in solving words.

(7) Writing letter

The teacher says, 'This is the letter a. Write it like this: around and down'  Say a as you write

it. The child learns to produce each letter in a proper sequence and direction of strokes and learns to associate its name with its symbol.

(8) Combination of two or more of these systems

A teacher may decide that, for his language, several of these systems have virtue and may be used in combination. This decision creates the problem of a further decision: in which order the systems should be used, or which should be used simultaneously.

ORGANIZATION BY CONSONANTS AND VOWELS

Whatever system the teacher uses for introducing the sounds of letters, he must introduce these sounds in some order. The following are typical choices of order by consonants and vowels:

(1) Consonant-vowel

The teacher teaches all the consonant letters first, then all vowels, and then combines these into syllables and words. This is a type of logical approach.

(2) Vowel-consonant

The teacher teaches all the vowel letters and sounds first, then all the consonants, and then combines these into syllables and words. This is also a type of logical approach.

(3) Consonant-vowel sequence

The teacher teaches a consonant and then a sequence of vowel sounds with it; then another consonant and the same sequence of vowel sounds with it; then another consonant and the same sequence of vowels. Sometimes charts listing these combinations of sounds are memorized, line by line. This is the logical approach common in the traditional teaching of language in India.

(4) Consonants and vowels grouped by sound resemblance

This also is a part of the old Indian system. This is the learning of consonants in groups of letters closely resembling each other in sound and in production. For example, aspirated and unaspirated forms of *k* would be learnt as a group, *k* and *g* sounds would be learnt as a group because both are produced through the

speech organs in nearly but not quite the same way. A criticism of this system is that pupils are confused when very similar learnings take place at almost the same time. *It is ordinarily better to learn one thing well, then later learn another well, then compare the two and learn the distinction.* This latter practice is well established in the teaching of speech, spelling and reading in countries in which the psychology and physiology of language learning have been scientifically explored.

(5) Occurrence in words

In this system it is recognized that ultimately all sounds and letters must be learnt, and that the order of their learning should be determined not by logic for logic's sake but by the efficiency of the learning. This system assumes that children learn best when they use what they learn for purposes which are important to them; that is, that inner motivation is potent and useful. Therefore, if the child wants to write a certain word, he learns, then and there, how to write the word and what the letters are. If he wants to read a word, he learns, then and there, the letters which compose it. In these illustrations of the use of this system, creative writing is the motive in the one case, and the reading of a story the child is interested in reading is the motive in the other. Organization by consonants and vowels may be a final outcome of this random approach, not the starting point. However, if the teacher chooses to teach only initial letters in words first, he will rather naturally deal with consonants first.

(6) Combination of systems

Combinations can be made of these systems. For example, point (1), in which all consonants are taught first, can be combined with point (4), in which consonants or vowels resembling each other closely in sound

and sound production are taught together. This combination, unless it is used along with a word approach or sentence approach (described later), delays actual reading in two ways: (1) words are formed by a combination of consonants and vowels, and cannot be studied until all consonants have been learnt and vowels begin to be studied and combined with consonants; (2) children are confused by learning together letters whose sounds are much alike, as a result they are slower in learning a given amount.

ORGANIZATION BY EASE OF WRITING FORMS

Some systems of learning to read have been designed in accordance with the difficulty or ease of forming the letters in writing:

(1) Graduated difficulty

This system starts with the letter simplest to write. In English this might be *l*, if a straight line is considered simplest, or *c* or *o* if the circle is considered simplest. The system proceeds gradually, then, to more difficult letters. An obvious criticism of this system is that the simplest to write may not produce a word for some time. Also, of course, what seems simplest to an adult may not be for a child. The system requires that research be done to see what is actually easiest for a beginner.

(2) Grouping of like forms

In this system, all forms involving a horizontal line are taught together, all those involving a vertical, a diagonal, or a circle. This system capitalizes on the child's mastery of one letter to start the learning of another. A child who can make a *c* does not have much more to do to produce an *o*, an *a*, or a *d* (in manuscript letters,

not cursive). However, this system can also cause confusion because the forms are so much alike and are learnt at about the same time.

In many parts of the world a traditional approach has been the learning of all the letters and letter sounds, and the writing of all of those letters before any real reading for meaning is begun. This can be a matter of only a few weeks. The child is not much more ready to learn a hard letter after three weeks than he is after one week. While one would not deliberately choose a letter hard to write, as the first one to teach a child, most of the world's scholars agree that the writing difficulty of a letter is not the most important or even a very necessary consideration in planning a reading programme.

ORGANIZATION BY WORDS

Some systems of teaching reading are based upon whole words rather than primarily upon letters or letter sounds or the writing difficulty of letters. As in the letter approach, the teacher may have the child learn to recognize the object (in this case, a word) merely by looking at the object and repeating what the teacher says, or the teacher may have the child learn to write and say the form of the object. Whatever the method used, the organization of words may be one of the following:

(1) Lists of words

In this case the child learns to recognize a list of words:

- (a) They may be in alphabetical order, as in a dictionary.
- (b) They may be grouped according to meaning:

<i>Clothing</i>	<i>Food</i>	<i>Toys</i>
coat	mango	doll
shirt	rice	kite

(c) They may be grouped by similarity of form:

cat	cat	dogs	coming
come	bat	cows	waiting
cow	sat	pigs	singing

(d) They may be grouped by parts of speech:

go	tree	good	and etc.
come	horse	happy	but

(e) They may be grouped by frequency of use in the language. That is, the most commonly used words in the language would be learnt first, then the next most common, and so on. Desirably, if this is done, a study should be made of the spoken vocabulary of children, and the most frequently occurring words which are also commonly found in written materials should be taught first.

(f) They may be grouped by the regularity with which they follow the rules of the language. If this were done in English, for example, the word *run* would be taught early but the word *have*, which violates the silent *e*, long vowel, rule, would be delayed. *Give* would be delayed, for by rule it should be *jive*. The misfortune of this approach, if followed rigidly is that the most common, most useful, words in the language are not always the most regular. This is especially true in English. In Hindi, if this were followed, the verb 'to be' (है, हूँ, हो, हूँ etc.) would be delayed, and the first verbs would be those whose endings, only, changed as in the case of जाना, खाना.

(2) Resemblance to objects

In this system the teacher tries to use the form of the word to assist the child in remembering its meaning. He equips the word *horse*, for example, with a head, mane, and tail:



The word monkey is remembered for the tail of the monkey and the tail of the y. The word moon contains two letters that remind the child of the shape of the full moon.

This system, of course, has limited application, and is accused of keeping the child so busy remembering how he remembers a word that his reading is hampered. Also, adding manes and tails to words rather obscures the shape which the child must remember and recognize without ornamentation.

(3) Chance occurrence

This system engages the child in reading (a book, a chart, a sign, or whatever) and teaches him the words which happen to be there. It is the way a parent might help a child to read, telling him what he asks about as the parent and child look at a magazine or book or sign together. A difficulty with this system is that a word a child asks about may not recur for some time, and meanwhile the child forgets. Furthermore, usually there are so many words the child does not know on a page of randomly chosen material that there is too much to learn at one time to be learnt well.

(4) Child choice

This is a system of teaching words as the child asks for them. In reading, the child may ask, 'What does

this say?' In writing, the child may ask, 'How do you write—?' The teacher supplies the word. In some schools a child keeps a card, file or notebook, and records and practises the word he has asked for. When it is done in a group situation, a group of children writing (by dictation from the teacher) a few sentences about something, the teacher may make a group file of words the children learn from what they have written. The particular value of this system is the high motivation of the child who wants to know for his own reasons. The major drawback is that the child may not ask for all the words he should desirably learn or as frequently as he could efficiently learn them.

(5) Combinations of these

ORGANIZATION BY SENTENCES

The organization of a reading programme by sentence units has a long history in some parts of the world. It drew its strength initially from the belief that children taught in smaller units than the sentence tended to read words or sounds without attention to meaning. In teaching foreign language it had the advantage of presenting common types of sentences to those who would have to hear and speak them. Lately it has had support from some linguists who insist that a word means only what it is used to mean in a context of other words, and that the sentence is the smallest unit of meaning. (Of course, one could argue that the sentence means only what it means in the context of other sentences; that a paragraph, etc.) The following are systems of organization which have had use in programmes:

(1) Short-long, or length of sentence

This is a system of starting by teaching the child short sentences, and gradually increasing the length.

Beginning language books contain short sentences, typically; and advanced language books contain longer ones. The sense to this is not only that short sentences contain fewer words to learn, but that the meaning of a short sentence is usually not so complex as the meaning of a long sentence, and requires less maturity to comprehend.

(2) Structure

This system is well-known in foreign language teaching. The commonly occurring structures of sentences in the language are studied one at a time, usually from simple to complex or difficult.

The man is happy.

The man is president.

I see the man.

I gave the man the newspaper.

There goes the man.

etc.

(3) Word-substitution

This is the structure approach, using the substitution of a word in a structure as a means of learning the structure and of increasing vocabulary:

This is a ball.

Is this a ball?

This is a pencil.

Is this a pencil?

This is a table.

Is this a table?

This is a crow.

Is this a crow?

The worst feature of points (2) and (3) is their dullness. The sentences are isolated ideas which usually not only are uninteresting in themselves but bear no meaningful relationship to each other. It is possible to build meanings, sentence by sentence, in a related sequence of sentences, but the dullness born of identical structure is unavoidable. (This is a man. This is a dacoit. This is a knife. This is a murder. This is a gaol!)

(4) Spoken vocabulary

In this system the spoken vocabulary of children is recorded, and the sentences and ideas which they commonly speak about are used to introduce them to books. The advantage of this system is that the child is at home with the words, the sentences, and ideas. The only thing that is new is the symbolism of written form. This system, of course, must gradually be blended with the sentences and ideas which children do not initially have or use.

(5) Children's literature

This system uses books which individual authors have written expressly for children. Children learn to read these books sentence by sentence, page by page, story by story. Sometimes a story the children like is written on the blackboard to be read carefully by all. Sometimes a poem is learnt in this way. Sometimes the teaching is completely individual, the teacher conferring with the children, one by one.

(6) Teacher-designed sentences

When children have learnt letters or words, sometimes a teacher writes sentences and has the children learn to read them as whole sentences. Because the teacher knows roughly what the children have learnt, he can make the sentences easy enough for them to learn. He may hint, 'This sentence tells what this table is made of. What is this table made of? Say it in a sentence.' The child responds, 'This table is made of wood.' He looks at the sentence as he says this. Gradually he learns the words.

(7) Children's dictation

In this system, children dictate to the teacher sentences they wish him to write in composing a group

story or a news bulletin. Then the children repeat the sentences and select the one to read when the teacher asks a leading question, until they have known them all.

(8) Children's writing

Here the children write sentences and stories using the words they have learnt to write, and ask the teacher for words they need which they do not know how to write. The teacher shows the child how to write the word, and he adds it to his sentence.

As has been said previously, all of these systems must be appraised by their suitability to the language to be used and to the ways children are known to learn best. Sometimes, however, an educator likes a system so much that, rather than forfeit it because of the nature of the language, he alters the language to suit the system. Ordinarily he is not the first person who thought of doing this, and either he does not know that it is a discarded idea or he believes conditions are now more favourable for its success.

For example, suppose a language is not completely phonetic (a separate sound for every letter), but the educator wishes to use a completely phonetic approach to the learning of the language, anyway. He decides that he will change the spelling of the words in his teaching materials so that they are completely phonetic. Then, after two or three years, he helps the children mentally to convert the phonetically spelt words into the adult spellings of those words. He tests the children and proves that it can be done. Other teachers try it and find it successful. Now he tries it out in many places, and everyone is very enthusiastic.

If this system works as well as another system which does not alter the appearance of the words, why is this so? Recently, for example, a forty-four letter alphabet has been experimented with in England and is taught in place of the twenty-six letter alphabet, so that

each letter will have only one sound. This system has spread to other English-speaking countries as well as to some where English is taught as a foreign language. Why should it be as easy to learn forty-four letters as it is to learn twenty-six? Why should it be as easy to learn words which do not look like the words on sign-boards, and in other places in the environment, as it is to learn words which are supported by counterparts in the surroundings? Why should it be as easy to learn words 'misspelt' for the first two or three years of learning to read, and then to learn to recognize the right spellings, as it is to learn them 'right' in the first place? If the words are easily relearnt, is it that the forms are so similar; and if they are, did this not create a difficulty in initial learning? Supposedly this system was used at the turn of the century (around 1904) and was not continued. What was unfavourable then which is now favourable?

The more letters you have in a language, the more use there is of the same strokes in different combination, and the greater the resemblance of some letters to others; hence, the greater confusion in visual discrimination. However, many children find visual differences easier to detect than auditory differences. If a letter form is given as a visual crutch for the auditory impression, perhaps the auditory impression is more easily established. But here, again, if auditory discrimination is so difficult for many children (and readiness tests show this), why teach the language mainly through its sound rather than through its appearance?

These are some of the questions which the recurrence of a discarded method raises. Only time and careful evaluation and study will yield the answers.

Most modern approaches to the teaching of reading to children which have been designed in consideration of all tried approaches (instead of simply being a revival or continuation of a traditional approach) are de-

signed in recognition of the fact that some of the approaches described above are not very helpful and that others are not entirely satisfactory. A combination of approaches is used, so that the deficiencies of one approach will be offset by the strengths of another.

For example, a story approach may be used so that children will be highly motivated to read and will read for meaning immediately; but, simultaneously with this, a word approach is added, so that children learn words; even a phrase approach so that children learn to read words in phrases rather than jerkily; a letter form and sound approach so that children can solve new words; and a structural analysis of words so that children can learn to recognize immediately parts of words (verb endings, for example) instead of sounding each letter separately.

WAYS CHILDREN LEARN

The way the teacher teaches these approaches is as important as the choice of the approach. In India, as in many countries, the traditional way in the primary classes has been for the teacher to say and for the children to repeat, the teacher to do and the children to do the same. The entire burden of thought rests with the teacher. If everything the child, is taught is taught in this way, he learns to read, but he also learns to wait for someone to do the thinking. Not only does he fail to read *thoughtfully* but he learns a habit of mind more suitable to a slave than to a free man.

Whatever approaches are chosen for teaching language, educators must present these approaches in such a way that children share the initiative. The beauty of this way is that the learning itself is more impressive because the children have 'invested themselves' in it, thought through it, given it enough attention to make discoveries about language for themselves. So the teach-

ing of reading suitable to the education of a free man is also the most effective education.

The practices listed above may be judged by the following pieces of evidence on children's learning.

Children learn most readily when:

They understand the organization of their work. (For example, a sentence is an organization of words which the child has heard and used in speech.)

They can associate the unknown with something known. (For example, if the child sees a picture, he can sometimes determine the identity of a new word on a page of known words. If more than one word is new, his job becomes either more difficult or impossible.)

They are informed immediately whether or not they are right in their response, and correct their thinking accordingly.

They are helped to discover a fact about reading, rather than being told the fact. (For example, the child who knows the words **मीना** and **की** can have the two words written, one below the other, and discover by pronouncing and looking, that the *i* sound is produced by **ी**; whereas, if he is told, he may only forget, or remember with less assurance.)

They know the meaning of what they are learning. (For example, it is easier to learn the forms of real words that the child knows the meaning of, than to learn the forms of invented words which have no meaning for him. This does not preclude the use of nonsense words in practising an established learning, but practice on something useful is more rewarding in the long run.)

Rote learning follows discovery of a fact about reading. (For example, once the child discovers that the *i* sound is produced by **ी**, he can practise the com-

bination of this symbol with others to acquire speed of association.)

They learn a method of learning for themselves, as well as the particular fact. (For example, if a child forgets the sound a letter makes, he needs only to think of two words containing the letter, in order to generalize the sound.)

What they learn has many immediate applications. (Delayed application or little application means loss of learning.)

One learning is built upon another rather than being completely unrelated. (The first thing learnt is reinforced as it is used in learning the second thing.)

They are encouraged to analyze wholes into parts and to build wholes from parts.

Meaning, name, and form are deserving of attention at all stages of reading development.

A GOOD READING LESSON

THERE ARE many ways through which we can ensure that the reading lessons at school are effective, that pupils make steady progress in acquiring reading skills, that growth in habits and attitudes is evident. In the first place, the reading lesson must be conceived not as an exercise in 'covering' so many pages of the prescribed

text but as a jumping-off ground for a variety of learning experiences. This can be made possible if a wider perspective is taken of the purpose of a reading lesson.

The act of reading is so familiar to adults that we often lose sight of what is involved in the process. Some of us take it only as a process of recognition and many times it happens that pupils are required to call out the printed word without paying much attention to the meaning of those words. There is a story of a little girl who was asked to read aloud to her class. When the teacher said to her 'Now, tell me what was the story about,' the little girl answered, 'Please, teacher, you only told me to read it. I did not pay attention to what it said. I forgot to listen to myself.'

Are the children in your class reading without understanding, without paying attention to the meaning, and forgetting to listen to themselves? Are they, day after day, calling out words, parrot-like, without really reading? Have you ever thought about what reading really is? How does a child make sense out of the black marks on white paper? It has been said that reading is a process of getting meaning from the printed page by putting experience to it. What does this mean?

DEVELOPING A READINESS FOR READING THE STORY

Suppose the reading lesson is a story. The teacher will be concerned with two kinds of readiness for each story: readiness for the concepts and ideas presented in the story, and readiness for the new vocabulary. They must build a background for the story first. If the story is about a bear the teacher will want to be certain that children know what a bear is. The teacher may show pictures of bears, he may ask children to relate other bear stories, etc. The teacher will make certain that when the word 'bear' is presented the child will have a picture in his mind with which to tie the word. In

the first books the concepts and new words are those known to most children. As the materials become more difficult and more mature, the teacher may need to do more and more building of background to take to the stories.

The next task is to present the new words in a meaningful context. The pupil must know or be able to analyze for himself the new words in the story at first. The teacher will present the whole word—showing and telling the word as it is presented in a sentence. He will say, 'Gopal saw a big black bear.' He will write 'bear' in front of the pupil as he says it.

From the very first, the pupils will be taught to help themselves by asking themselves:

'What word makes sense here?'

'How does it start?'

'Do I know any part of it?'

GUIDED READING

When the background for reading the story and when the new words have been presented, the pupils now open their books. The teacher asks the question, i.e., 'What was the boy's name?' The pupils read the line silently and then the teacher selects one pupil to answer the question. One pupil may be selected to read the line orally to prove the answer correct or incorrect. At first the questions asked may be answered by reading one line. Later, in order to find the answer, the pupils read two lines silently, then three and finally a whole page or whole story in the later books. Children should always read silently first. Oral reading will be the second stage.

REVIEW OF VOCABULARY

Before the student is asked to re-read the story for a specific purpose, there should be a quick review of

the vocabulary which might give trouble to the students. The words might be on the chalk-board and the teacher will ask children to review the words orally. The teacher may ask the question, i.e., 'Which one is the name of a bird?' The pupil will select 'crow' and say, 'crow,' while the other children see the word, hear the word and think of its meaning.

PURPOSEFUL RE-READING OF THE STORY

The students may be asked to study and re-read the entire story. During this reading they may ask for help from the teacher or refer to the words the teacher has written on the chalk-board. Then the pupils may read orally for a specific purpose; for example:

To dramatize the story.

To answer a specific question.

To read descriptive parts while pictures made by the students are displayed.

SKILLS, HABITS AND ATTITUDES

The development of the skills of word analysis and comprehension are important tasks for the teacher.

1. Do the students get the main idea of the story?
Can they give another title for the story?
Can they select a 'best title' from a group of titles?
2. Can the students remember the details of the story? What did——do? etc.
3. Can the students retell the story in the proper sequence? First this happened, then something happened? etc.
4. Can the student go beyond the story itself and draw conclusions, make inferences and evaluate the material? 'Is this true or not true?' the teacher will ask. 'What do you think his mother will say?'

Word analysis skills can be developed using an inductive method of learning. That is, the pupil will be given three or four examples so that he can discover the principle for himself. Exercises will follow in which the student is asked to use what he has learnt—to apply the principle to unknown words.

The skills are sequentially taught, that is the easiest skills are taught in the beginning and they are reviewed and added to, later. At first words are taught. From these words consonants are taught, vowels, matras. Through these consonants and matras, the children solve many more words than they know by sight and through context.

Habits of using the table of contents, of going to books for information and pleasure, are established and continue through the grades.

Proper attitudes towards reading, appreciation of books and stories are also developed early.

RELATED ACTIVITIES

Whenever it is possible to integrate the reading lesson with other subjects, it is beneficial to do so.

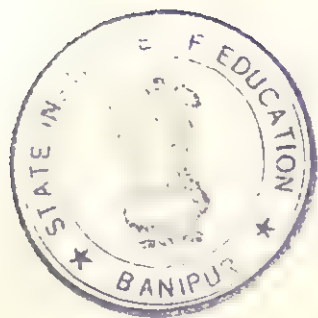
Are there possibilities in a story for strengthening social studies concepts?

Are there arithmetic problems inherent in the story?

Are there possibilities for creative writing, listening, speaking, or does this story strengthen the total language programme?

Is this story one which has related stories, music or poetry?

Is this a story children may illustrate?



THOUGHT PATTERNS IN EXPOSITORY WRITING

WHAT DOES an author do when he writes? He puts down ideas. Where does he get them? He puts these ideas in a certain order. Why? He gives you the world as it has come through his senses and as it has been processed by his brain, through the medium of words—words which, in turn, the culture has given him,

by which it has both enlarged and limited his awareness of environment. By the time you see the result, as a reader, it is a pretty special product, expressed in no other words, organized in no other way, and offering no more or no less than what the author wished to give. (A good reason, right there, for reading more than one author in more than one culture, on any one subject!)

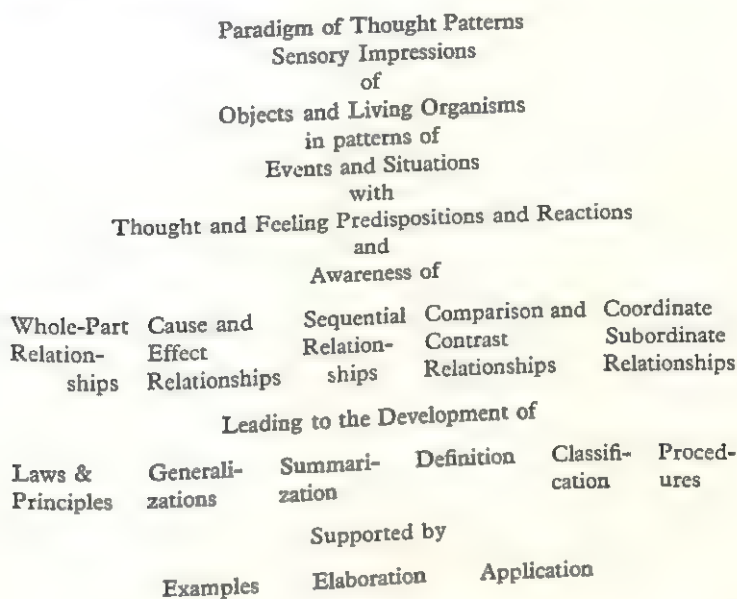
Do you remember a time when you were a child, that an adult took your hand and said, 'Let's take a walk'? Do you remember what you said as soon as you could speak? 'Where are we going?' You were full of questions. 'Where?' 'How?' 'Why?' The good reader, as he agrees to go along with the author, asks such questions, anticipates a turn at the next corner, a branching of roads and a decision. He sees things the author misses in his logic or in his selection of ideas to present; he learns the preferences of the author by the length of time he stops and stares; he resents, as he once did the pull away from the toy-shop window, being hurried along from a topic in which he has special interest; and, in the end, he agrees or disagrees with what the author has to say about the journey, but, even here, he may have quite individual reasons for doing so.

Think what an author takes on when he writes an article. Every person who reads his article gets something slightly or greatly different from it, like the child invited for a walk. The critics write reviews. The author gnashes his teeth. 'They miss my POINT,' he cries, 'Don't they know what I mean when I say . . . ?' 'Didn't they see what I said in the fourth paragraph?'

Sometimes the author is right: they missed his point. Sometimes the critics are right: he doesn't express himself well; he doesn't organize clearly; he makes it hard for the reader.

The ideal would be an author who knew how to make himself clear, and a reader who knew how to read

the author's signals. To reach that ideal, both author and reader need to understand the ideas and thought patterns with which they both have to work. Where do those ideas come from? How are those thought patterns developed?



The paradigm above gives you some idea of what goes on in a human being as the world buffets him. Through his eyes, ears, nose, and touch, he receives sensory impressions of the animate and inanimate objects in his environment. These objects may appear in a pattern of events or in certain situations (framed, as it were, in time or place). With regard to these objects, events and situations, the brain does not serve as a filing cabinet. Certain attitudes and feelings which the human being has developed from previous experience or which are immediately formed in response to pleasant or unpleasant sensations influence the reception. Strong

feeling against something, for example, may cause a person to ignore it or, on the other hand, to be aware of nothing else in a situation. Awareness, then, is more than a faithful copy of the world in the person's mind. Parts of existence are magnified or distorted by the person's feelings and thought—to the point of blotting out or minimizing others.

Now, we might say, the brain is left with all sizes of observations, some magnified, some distorted, reduced, some rubbed out. What happens? Normally, unless the person has been educated to be a rubber stamp, a spewer of the spewed, he becomes aware of certain relationships among these observations. He 'turns things over' in his brain:

Whole-part Relationships. A frog is not just a frog. The leg is part of it.

Cause and Effect Relationships. The rain did not come from nothingness. There were clouds in the sky. The river did not rise by magic. It was filled with rain from all over the countryside.

Sequential Relationships. Something happened at ten o'clock, something else at eleven. In the life process there is first the egg, then the tadpole, then the frog. The towns that you pass on the road from Delhi to Agra are first—, then—, then—.

Comparison and Contrast Relationships. These two cars are both Ambassadors (comparison). But (contrast) one is white and one is grey. The bird has a nest, but I have a house.

Coordinate-subordinate Relationships. My father and Madan's father both live in this village, but the panchayat runs it. These two wheels turn on this axle independent of each other; dependent on the axle. They are held on by pins on either end (dependent on pins). Of dog and cat, the bark belongs only to the dog, the purr only to the cat. The dog is not a cat. The cat is not a dog.

The awareness of these various kinds of relationship among the observations can lead to certain kinds of products:

Laws and Principles. Everything has a cause. Nothing is put into motion without the application of some force.

Generalizations. (These pertain to the immediate data, whereas laws and principles are the result of many such data and generalizations.) Rain helps my garden.

Summarization. These plants need good soil, moisture, and sunlight.

Definition. A nest is a home of a bird.

Classification. The waters of this river are used for irrigation and for the production of electricity. (Uses of water: (a) irrigation, (b) electricity.) Man and the whale are both mammals. (Mammals: (a) man, (b) whale.)

Procedures. The first step in making this cake is to assemble the ingredients. . . . Next. . . . (First, Second, Third, etc.)

Once these products of the mind are established, the mind continues to find utility in them, the need to defend them, and evidence of their validity. In exposition of them to others, the writer makes use of examples (just as I have done immediately above), elaborates them (just as I have done in presenting the material following the paradigm), and applies them when necessary or desirable.

Examples. As an example of the principle that 'Everything has a cause,' the writer may say that a bird flies away when you approach because it fears what you may do.

As an example of the generalization, 'Rain helps my garden,' the writer may say that his beans grew an inch overnight after a good rain storm.

Elaboration. To elaborate on the idea that plants need good soil, the writer may suggest the kinds of soil he

considers good, the nutrients which should be in the soil, for certain kinds of plant.

To elaborate the idea of a nest's being the home of a bird, the writer may say that there the bird lays its eggs, feeds its young, and keeps them until they are ready for an independent life; there the bird returns at night or on a stormy day.

To elaborate the first step in making the cake, the writer will list the ingredients to be assembled and their quantities with perhaps even specific recommendations of brand names.

Application. If the writer applies the principle that 'Everything has a cause,' to the presence of flies in the screened house, he will have the reader consider how the flies could have got in, what had been open or contaminated, who had been responsible, how it might be prevented.

To follow the thoughts of a writer, then, is to follow the possibility of his doing one of the fourteen or more different things with the data he has at his disposal. (Because my brain is not the ultimate brain in the world, I am supposing that my paradigm is not a perfect statement. You may improve upon it.) Unfortunately, he does not say at every turn, 'Now I'm stating a principle. . . . Now I'm expressing my feelings about it. . . . Now I'm presenting an analogous situation, using my powers of comparison. . . .' and so forth. The reader has to sense these directions.

'Why should he sense them?' you ask. 'Why doesn't he just read along, and follow as though led with a rope around his neck?' Well, for one thing, he would accept without question what the author had said. He would not see how the author had arrived at his conclusion. He would not know what was important to remember from the material he had read. In short, he would read the way most adults today have read all their lives, to the world's sorrow.

'Oh' say you, 'but I belong to the new generation. I have learnt to read for the main idea of every paragraph.' That is very nice, and you and your teachers should be very proud. However, the main idea of a paragraph is not always the important thing to remember. The reporter writes, 'Country X has cut off diplomatic relations with Country Y.' That is his main idea. Is that what you should remember about that paragraph? Does it do you any good to know only that? The important news is buried further on: the reason for the action. Only if you know the reason can you hope to improve a rapidly deteriorating situation. Perhaps arbitration can prevent armed conflict, but not unless you exhume the reason buried in that paragraph.

Again, suppose you read, 'There are seven danger signals of cancer.' Is that enough to do you any good? It is the main idea of the paragraph. But the important news is not one summary sentence but seven vital points.

With examples as grim as the threats of war and death, perhaps you are now willing to follow along on my rope! (I have, by the way, made a generalization) —'To follow the thoughts of a writer... is to follow the possibility of his doing one of the fourteen or more different things...'—answered your one question with three flat statements on the effects of docility, which you did not challenge, and answered your defence with two examples of its fallacy. 'To the world's sorrow' at the end of the second paragraph in this sequence suggests my attitude—thought and feeling reaction—toward the reading behaviour of most adults. If you consider my attitude an insult to your father, or yourself, you may impetuously reject all that I have said and try to find facts to prove that I am wrong. Added to insult is the fact that I have made three flat statements about the consequences of docility in reading, which I have

not supported with facts. If I am not careful, you may even throw the book down and refuse to read further. But at least you are an active thinker as you read!)

To report a piece of news — an event

On Saturday our class went to Ranikhet. We rode in a big bus. It was very hot on the winding highway and also in Ranikhet. When the bus arrived at Ranikhet at one o'clock, we had four hours to explore. Some went to the temple, some to the shops, but all twenty of us were at the bus when it was time to depart. The way back was cooler, but too dark to show the mountains. We chatted and joked in the dark.

The writer is reporting an event, starting with a summary sentence which tells *who* (our class), *when* (Saturday) *where* (to Ranikhet—whence is not stated) and *what* (went). The next sentence tells *how* (by bus). The *why* the reader has to gather by clues (Some went . . . some . . . chatted and joked) and summarize for himself as *pleasure, purchases and information*. The rest of the paragraph is chronologically organized from departure to return. The reader has to deduce for himself that it was five o'clock when they were to start back, and that it must have been a long ride if the writer's impression was chiefly of darkness.

The writer has given the reader little on which to judge the desirability of such a trip. He reveals his own judgment in the words *big, very hot, cooler, and too dark*. If the reader likes bus travel, and does not mind being very hot if the compensation is to see temples, to shop, and to chat and joke, he may decide to go to Ranikhet some day himself.

The writer makes the reader infer that the sentences beyond the first are in chronological order, from words like *in a bus—on the highway—when arrived—some went—when time to depart—way back*.

In planning the paragraph, or at least in thinking it as he wrote, the writer was doing something like this:

when we did what
how we did it
how it felt
how long we stayed
what we did there: (a) some this (b) some that
how it felt and looked coming back
what we did on the way back

The reader catches this plan from the author by several means. First, he must recognize a summary-news sentence as different from other kinds of sentences. If the first sentence or the first few sentences of an article tell when something happened—who did it—perhaps how and why, the reader has a right to expect that he is reading a description of an event. An event has a beginning and an end. Chronological order is a natural expectation (though an author does not always fulfil it). Therefore the reader has a ready-made plan of attack in his mind (a mind-set) for this kind of material. After he finds out the who, when, where, what, why, and how, he keeps mentally asking, 'What next? What next? Then what?' until he has the sequence of happenings.

The brain is as quick as a wink. A great deal goes on in the good reader's mind as he takes what he wants from the author. Luckily, the good reader keeps his thoughts separate from the author's thoughts, and can tell you what the author said and what he, in addition, thought, without getting the two sets of data mixed up. (Many poor readers forget which was which.) With his own purposes in mind, a reader might read the news event like this:

On Saturday our class went to Ranikhet,
(Hmmm. Might want to go myself sometime.
How was it?) We rode in a big bus. (Might be

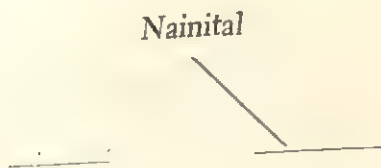
fun, eh?) It was very hot on the winding highway and also in Ranikhet. (Ohoh, hot and twisty. I could get sick on that kind of road. What about Ranikhet?) When the bus arrived at Ranikhet at one o'clock, we had four hours to explore. (Wonder how long it took to get there? Long, hot trip, I'll bet. Well, what was good about Ranikhet?) Some went to the temple (Not all together—you could do what you wanted), some to the shops (Fun—tourist traps?) but all twenty of us (Oh, twenty went—lots of room on the bus, but the bus not held down very well over the bumps) were at the bus when it was time to depart. (Pretty good record. Usually there are stragglers. May be there wasn't much to see. May be it was too hot to walk around much. Then what?) The way back was cooler (Ah, that's nice), but too dark to show the mountains. (What a shame for the people with cameras. So what?) We chatted and joked in the dark. (There was good morale in spite of two disappointments—the heat and the darkness. I'd like to know more about Ranikhet before I decide to go.)

In summary (I am signalling summarization), the active reader of a news article is able to distinguish a summary statement of an event, to look for the answers to the basic questions (who, etc.) in it, to pick up the clues to time change in a chronological account (first...then...after...by evening..., etc.) and to remember those events in order. If he has a purpose of his own (such as going to Ranikhet himself someday) or if a teacher has set one for him ('Read this to see that you would want to know in addition to what the author has told you.') He will ask additional questions of the material and react to what he finds with thoughts and feelings of his own.

To classify (diagram)

The lake town of Nainital has two centres. One is around the south end of the lake and is called Tallital. There is a bus station where tourists arrive and depart. The other centre is Mallital at the upper and opposite end of the lake. It contains a sports area and a theatre, and many shops.

The author of this paragraph wanted to make his reader aware of the fact that Nainital had two centres of activity, one at the northern end of the lake and one at the southern, to give the names of each, and to tell something of the character of each. The key to his purpose (classification) lies in the first sentence. *The lake town of Nainital has two centres.* In the reader's mind, as in the author's mind, there should be something like this:



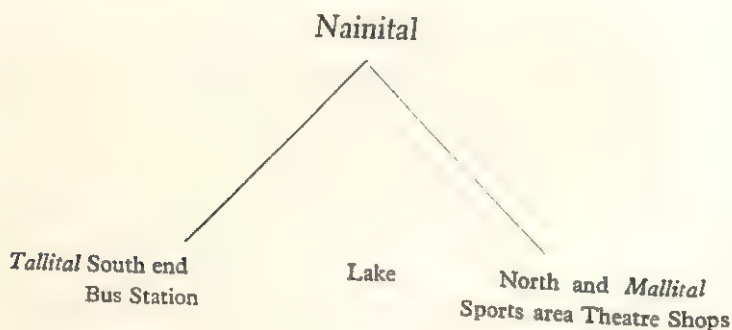
The stimulus of this 'town....has....two centres' should provoke the question: 'What are they?' If you ever studied Latin, you probably remember the beginning of Caesar's *Gallic Wars*: 'All Gaul is divided into three parts.' The student who laboured through the translation of this sentence should have expected to find and remember the names of the three parts. (Don't ask me now; you are forty years too late!)

As the student reads the paragraph on Nainital, he picks up clues to the organization of the author's ideas:

...One (of the centres) is around the south end of the lake (position) and is called (name of first blank

in diagram) Tallital (write it down so that you won't forget it). There (in Tallital) is a bus station (what's there) where tourists arrive and depart (use). The other centre (the second of two) is Mallital (name to write down in the space in the diagram), at the upper and opposite (upper perhaps means the water enters this region of the lake, opposite means opposite of the south end, so north) end of the lake. It (Mallital) contains (what's there) a sports area (entertainment) and a theatre (entertainment), and many shops (purchasing). (Tourists come in at one end and spend most of their time at the other, probably.)

The diagram, filled out in the reader's mind or notebook, should look something like this:



He should be able to answer such questions as: Where is Nainital situated? What are the names of the centres? Where are these centres? What is in each centre? From the sheer bones of his diagram he can easily produce these answers. He can do it because he has visualized or written down the diagram the author has dictated, and because he has been able to profit by key words such as *two*, *one*, *called*, *there*, *other*, *opposite*, *contains*. And, of course, the word *south* is unmistakably a word indicating the position of the one centre.

Beyond these minimal observations, the reader might be required to answer questions which require him to see cause and effect (Why do tourists come to Nainital?), to draw conclusions (if you were a tourist, which end of the lake would be more interesting to you, and why), to infer (By what means of transportation do some people come to Nainital? More than a few people? Why do you think so?), to interpret (What two meanings might the word upper have in this context? Which do you think is intended?), to project (What else do you think might be at the south end of the lake, and why do you think so?).

To present a sequence (series of steps)

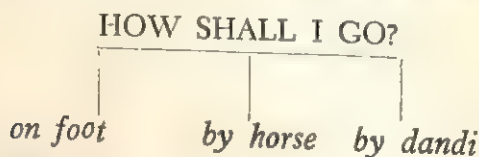
Going from the bus station to Birla School is not so simple as one might think. First, many men at the station vie with each other for your baggage. When that is finally settled, and you have selected your coolies, you still have to decide how you, yourself, will go: on foot, on horseback, or by dandi. Suppose you decide to go by dandi. You will have to select four men who will carry the dandi, and make clear to them the destination and the fee. Then they start with you up winding trails. They make two or three stops on the way, to catch their breath. After an hour of riding, you finally come to the top of the hill and Birla School. The first sentence in this paragraph sets the problem (from bus station to Birla School) and states an opinion (not so simple as one might think). The reader interprets this as meaning that it is in some degree a complicated business, going from the bus station to the school.

The first word in the next sentence (*First*) signals the author's intention of giving a series of steps in the process of getting from the one place to the other, and

the reader sets his mind for a series of steps, each signalled (First...When...Then...two or three stops...After...) in some way, and stated as a series of acts (vie....selected....decide....select....make clear...start...make...come...). As the reader reads, these pictures come to his mind:

- (1) Men pushing and arguing over baggage.
- (2) You select coolies (men) to carry your baggage.
- (3) You puzzle (Shall I take *dandi*, horse, or shall I walk?
- (4) You decide on *dandi*.
- (5) You pick four men to carry the *dandi* saying
(a) This is my destination. (b) This is a fair price.
- (6) You get into the *dandi* and start up the hill.
- (7) The men put you down here.
- (8) The men put you down there.
- (9) Perhaps the men put you down again.
- (10) One hour after point 6 you arrive at Birla School.

Note that Point (3) is a three-branched diagram:



But the overall design of the paragraph is a series of steps describing transportation from bus station to Birla School. The reader is encouraged by the author to 'live' the experience and so visualize it more clearly, by the author's use of 'you'. Two problems may block the reader: He has to infer that *men* and *coolies* are used synonymously. Also, if he doesn't know the meaning of the word *dandi*, visualization will be more difficult.

After reading this paragraph, the reader should be

able to say what the problem is, what the steps are, in correct sequence, and whether and why he agrees with the author's opinion, 'not so simple'.

When the reader reads 'Going from the bus station to Birla School is not so simple as one might think', he asks, 'Why?' Then, when he sees, 'First', he fixes in his mind that this is the first reason, but as he reads that sentence and starts the next ('When'), he realizes that this is not only a first reason but a first step in a sequence. From that time on, he asks, 'Then, what?... Then what?...' and so on until the end of the steps. The active reader has sensed the author's purpose and design, and has set his mind with questions suitable to them.

To express cause and effect

Some people who came to attend our course at Birla School thought that they would get fat from so much sitting in class. For this reason, they took long walks up and down the trails around the school. But whatever they lost in poundage on the walks, they gained afterwards. Each walk made them hungrier. They ate more and more. When last heard, they were criticizing the dhobi for shrinking their clothes.

The author is dealing with a series of causes and effects: sitting causing fear of obesity, fear of obesity causing walks, walks causing hunger, hunger causing more eating, (unexpressed: more eating causing gain in weight, gain in weight causing tightening of clothing), tightening of clothing causing criticism of dhobi. In the organization of his paragraph, he has done something like this:

what some people thought
what they did about it
what effect it had

why it had that effect
 what they did because of what they thought had
 happened.

'For this reason' is a clue to the reader that the first sentence states a cause, and the next will state an effect, an effect of the people's thought.

'But', in the third sentence, signals a reversal, a change of expected direction. The people achieved just the opposite effect: obesity, instead of slimness. This reversal is emphasized by the use of antonyms, 'lost' and 'gained'.

The reader must know that 'hungrier ate . . . more . . . more . . .' are causes for gain, for the author does not give a verbal clue to the fact that these are causes.

'When last heard' makes the reader know that the end of the story has arrived. It is the author's signal that the last of the causes and effects has come. The reader has to think what a dhobi's shrinking of clothes has to do with gaining weight. Then he laughs, for he is in on a secret with the author. He and the author know that the people gained weight, but the people still think they are winning the battle of the bulge. If clothes are tighter and weight is lighter, obviously the dhobi is the culprit.

This paragraph is much more complicated than many paragraphs of cause and effect, for often the author will deal with only one cause and one effect. He may start with the cause, which the reader recognizes as an act or situation or feeling (He struck the desk. (or) It was raining heavily. (or) Suddenly she felt dizzy.) Then he may or may not signal with an expression such as *therefore*, *as a result*, *consequently*. Sometimes he depends upon the reader's knowledge of such acts, situations, or feelings, to tell him that the next part of the paragraph is an effect or consequence. (The letter opener rattled on the glass. (or) Streets were like lakes. (or) She put her hands to her head.)

In reverse manner, the author may start with the effect and then tell the cause:

The letter opener rattled on the glass. He <i>had</i> struck the desk.	Streets were like a lake. It <i>had</i> rained heavily.	She put her hands to her head. She <i>had</i> suddenly felt dizzy.
--	---	--

Notice how the change in the verb tells the reader that the second, preceding the first, may be the cause of the first. That change, and the reader's own experience with cause and effect in life, are the only signals.

The reader should emerge from reading such a paragraph knowing the two events or situations or feelings, and knowing which caused which.

To compare or contrast

The snow-capped peaks of the Himalayas appear to be much like other snowy peaks one has known. Their ridges loom white above the misty atmosphere and the shadows between ridges form vertical grays among the horizontal lines of the stratus clouds.

But, in the case of other mountains viewing is a matter of raising the eyes only slightly above the attendant foothills. The peaks we see from Nainital are shy of the observer, showing only on clear days and then only for a short time above the cloud bank. Furthermore, the one who looks for them, even from a vantage point of 7500 feet above sea level, must look halfway up the sky from the horizon. The unbelievable height of these peaks and the bank of haze beneath them, give the impression of a mirage, a supernatural phenomenon, whose image persists in the memory of the observer.

The author of these two paragraphs (which might have been written as one paragraph, with a turning

point at the word 'But') has had in mind something like this:

Himalayan peaks much like others (comparison)
ridges white above mists

shadows vertical gray

But (contrast)

Other mountains a little above foothills

Himalayan peaks

not always visible

high in relation to landscape

The author expects the reader to see the comparison (*much like*) in his first sentence, and to sense, without signal, that the two points (ridges...and shadows....) support the statement.

With 'But', the author signals a difference, a reversal, and expects the reader to know that the reverse of comparison is contrast. He speaks then of other mountains, identifying this first point in his second paragraph as a feature of other mountains that is not true of the Himalayas. When he starts the next sentence ('The peaks we see from Nainital'), he expects the reader to know that the peaks seen from Nainital are Himalayan, and that whatever is said will be contrary to the statement about other mountains. If the Himalayan peaks are seen only on clear days and then only for a short time, and since this statement is made in contrast, the reader must assume that most mountains can be seen on most days, and, in many cases, of course, this is true.

The words *unbelievable*, *impression*, *memory* make the reader know that the author is giving a human reaction to the scene. The words *mirage* and *supernatural phenomenon* are comparatively used, since, as the reader knows, the Himalayas are neither a mirage nor a supernatural phenomenon.

The reader should derive from this presentation that the Himalayan peaks are like other peaks one has

seen, having white ridges above mists and vertical shadows, but that they are different in that they are rarely visible, and so high and so separated by mists from the rest of the land as to seem unreal.

The fact that the author put his comparison first and his contrast second, along with an emotional punch in the words *unbelievable* and *supernatural*, suggests that he wants the reader to be impressed with the uniqueness of the Himalayas rather than with their resemblance to other peaks.

(Notice the difference in effect of these two statements: They look like other mountains, but they are higher. They are higher, but they look like other mountains.)

The author's purpose, then, is to pay tribute to the uniqueness of the Himalayas, and to transmit some of his own wonder to the reader. He does these things by means of comparison and contrast. The reader must ask himself as he reads: 'Does this tell how they are alike? How they are different?'

To enumerate (a..b..c..d..e..)

We have had to do a lot of work in this course. For one thing, there have been the lectures by Americans in English, when English English would have been hard enough. For another, there have been the lectures in Hindi; and since there are many dialects of Hindi, these, too, have been a strain. The instructors have said in a short time too much that is important, so that note-taking has been difficult. Then there have been readings, projects, problems, and discussions. It is a wonder that we are still alive.

A paragraph of enumeration contains points whose order is of no particular consequence. In this way it

differs from a paragraph of sequence, in which first one thing happens, then another, and not the reverse. The pattern of a paragraph of enumeration is the pattern of a grocery list. There may be logical groupings (all the dairy products together, for example), and an order among logical groupings, but there does not have to be. It is just easier for the reader if things normally associated are together.

The author's ideas in the paragraph above are ordered in some such way as this:

Main Idea: We had to do a lot of work in this course.

Proof, job by job: listening to American English
listening to *khari boli* and dialectical variations
taking notes fast
reading
doing projects
solving problems
participating in discussions.

Comment on the amount of work (humour of exaggeration). The first sentence is a statement of opinion. The word *lot* signals this. 'For one thing' signals the first point. 'For another' signals the second. The fourth sentence ('The instructors...') is a statement of cause and effect, which can be recognized as a new point only because it has to do with time and note-taking rather than language. 'Then' signals another point, which turns into a series of four, set off by commas.

The last sentence is again opinion, triggered by the word *wonder*. Since the reader knows that few if any people die of listening, reading, studying, speaking and writing, he recognizes the statement as an exaggeration. Either the author is overwrought or he intends humour, to show that, for all the struggle, he isn't angry, disgusted, or outraged.

After the first sentence, the reader asks 'Why'?

After 'For one thing', he wonders, 'What else?'

A thought pattern of enumeration does not necessarily start with an expression of opinion. It may be a statement of fact ("There are seven danger signals of cancer'). Or it may start with enumeration and end with a statement or expression of opinion. Or it may start with enumeration and let the reader guess what all of these concern. Enumeration occurs when the author presents a list of items which have a common relevancy. How kind he is about signalling his purpose and his introduction of new points to the reader depends upon his writing skill and upon his awareness of the reading problem.

To define (descriptive)

An Indian is a human being easy to identify. He will be light or dark, and have one of many of the world's facial types and body structures. In size he will range from tall and thin to short and thin, tall and fat to short and fat. He knows three or more languages and usually will be found speaking in the one you don't know. If a person of this description is in India, the chances are good that he is an Indian.

'An Indian is' denotes a definition. The word easy signals opinion, and the reader's reaction should be, 'What makes you think so? Why?' The author goes systematically through points on the Indian's appearance, size, language, and location. The reader should be thinking: colour... facial types... body structures... size... languages... country, as he encounters these points. The reader's mind set is: 'How does he look? What does he do? Where will I find him?'—the kinds of question one would expect to be answered in a paragraph of this kind.

As the reader reads about the Indian's appear-

ance, he thinks, 'Good heavens! He may look many ways.' When he reads about his size, he thinks, 'And any size.' When he reads about language, he thinks, 'And speaks in several languages.' The one solace is that he will find an Indian in India (among other places). Then he realizes that the author has been teasing him. It is not easy, it is *hard* to identify an Indian.

To present a principle

If you climb high into the mountains, your breath becomes short because of the effort of the climb and the thinness of the air. If you stay by the sea in a cool climate, you will feel brisk and strong, prone to walk quickly and think clearly. If you are by the sea in a warm climate, the moist, warm air may feel oppressive, so that you wish to move slowly and are not too eager to exert yourself. So, if you travel, you will find in your own reactions the proof that environment influences living things.

The author of this paragraph wants to make the point that environment influences living things, that we are to a certain extent creatures of our environment. Is a man lazy no matter where he is, or would an industrious man become 'lazy' under the same circumstances? The author has used altitude, temperature and humidity to make his point. He could as easily have used other factors, such as wages, housing, and fear. By putting the reader ('you') in three different situations, and by attributing three different reactions to him, the author proves his point.

The author could have as easily started with his principle and followed with his examples: 'Environment influences living things. For example. . . .' His purpose in starting with the examples might have been to engage the

interest of the reader through the references to his own reactions, or to convince the reader of the differences in his own reactions, before presenting the principle. In the latter way, the author does not have a fight on his hands; the reader agrees with him already. It is a common technique among propagandists, who, by telling us just the right (or wrong) things, get us to draw an obvious conclusion with them, without a struggle.

Sometimes an author gives only one example. Sometimes he doesn't give an example at all, but merely elaborates or defends his idea by logic. Full of energy, he may present a principle in one paragraph, elaborate it in another, defend it in another, and give examples of it in another.

In the paragraph presented above, the reader must see that the first sentence states a situation, an effect, and a cause; that the second states a situation and a cause, followed by an effect; and in the third sentence a situation and a cause are followed by an effect. (All, by the way, start with a hypothetical 'if' clause, suggesting a parallelism.) The 'so' in the last sentence predicts a 'what': If this, so what?

'Environment influences living things' has a special flavour which the reader must learn to recognize as the flavour of general truth or, at least, of generalization. Each one of those words is an abstraction for many specific instances. There are many kinds of environment, there are many actions that influence, and there are many kinds of living things. From the personal, specific 'youness' of the earlier sentences, the author abruptly shifts to general terms. The 'so' signals a causal relationship between the first three instances and the statement at the end, because this is true, this is true and this is true, therefore this is true. Unless the reader can detect the difference between the wording of the general and the wording of the particular, and unless he can see the logical connection between the two ideas, he cannot be a

successful reader of this kind of thought pattern.

The author's notes may have looked like this:

Environment influences living things.

Proof:

Altitude	Tempera- ture	Humidity	Effect
(a) high (air thin)	——	——	Shortness of breath
(b) sea level	low	——	vigour
(c) sea level	high	high	inertia

The reader will have to be able to answer questions such as: What principle have you learnt? What proof can you cite for it? The reader's notes, then, cannot be too different from the author's.

To illustrate (example)

An interesting example of this influence is the rhododendron. In Nainital at 7500 feet, with fog and abundant rainfall, this plant grows into a forty-foot tree, with bright red blossoms in its crown. In Berkeley at 500 feet above sea level with less rain but much fog, it may grow to ten or fifteen feet as a many branched bush. At an elevation of 4000 feet in the eastern mountains in the United States, where rainfall is plentiful but winters are cold, it grows to a height of four or five feet.

The author takes a separate paragraph here to illustrate the principle he presented in the preceding one. 'This influence' refers, of course, to the influence of environment mentioned in the earlier paragraph. Again he uses parallel structure (In Nainital... In Berkeley... in the eastern mountains...) to signal the three illustrations he is giving. As in the preceding paragraph, in which he took the reader into three different situations, he has taken one thing (the rhododendron) and described its condition in three situations. Altitude, rainfall, and tem-

perature are the environmental conditions which are the variables here.

The author is working from a mental chart or has written down something like this:

	<i>Altitude</i>	<i>Rainfall</i>	<i>Temperature</i>	<i>Effect</i>
Nainital	7500 ft.	abundant (much fog)	(widely varied)	40 ft. tree
Berkeley	500 ft.	light (much fog)	mild	10-15 ft. bush
E.Mts.		plentiful	varied	4-5 ft.
US	4000 ft.	(much fog)		bush

The reader, in turn, must either write down or fix clearly in his head the data on the variables in the three situations, and the variable outcomes. The author leaves to the reader the job of determining the potency of each variable.

The fact that this paragraph is illustrative is signalled in 'An interesting example'. A less considerate author would have presented the three variations without the introductory sentence, and let the reader infer that a type of plant growing in three different places is another illustration of the effect of environmental differences on living things.

A biology teacher would expect a student to do more thinking on these illustrations, to 'read between the lines.' What does an altitude of 7500 feet mean in potency of the sun's rays? How are plants in Nainital protected from the heat of the sun as well as the worst of the cold? (Much moisture-heavy snow protecting roots of plant; fog reduces heat of hot days and protects from the coldest air as well.) What, then, does this most favourable climate for rhododendrons provide that is less true of Berkeley or the eastern mountains?

The reader should not be intimidated by statistics. What part of Nainital is at 7500 feet? Not the town pro-

per. What part of Berkeley is at 500 feet? In which eastern mountains are these figures true? Surely not in the Great Smoky Mountains, named for the vapours which shroud their peaks and preserve moisture for lush growth.

The reader may be annoyed by the use of 'plentiful' and 'abundant' without numerical interpretation. The dictionary indicates that abundant may be thought the greater. The reader refers to an atlas to find the rainfall in Nainital as compared with that of West Virginia. He feels that the author's loose terminology misrepresents the situations. His biology teacher is proud of such a die-hard.

To present evidence followed by interpretation

(phenomenon – reasons)

In Delhi when the sky is clear, the nights are starry; but in Nainital the sky is crowded with many more stars. The reasons for this difference may be the amount of electricity which competes with the night sky, the clarity of the atmosphere at different altitudes, and the collection of impurities in the air in a city as compared with that in a small town.

In Delhi when the sky is clear (this is not always but must occur some of the time) the nights (it happens on several nights, apparently, this is a statement which is the result of several observations) are starry (it is a generalization in the form of cause and effect). But in Nainital (not Delhi—this is a second situation, and the *but* suggests contrast) the sky (same old sky) is crowded with many more stars (more than what? must be more than in Delhi).

In the author's head is something like this:

Statement of contrast: When atmosphere is clear

Place
in Delhi
in Nainital

Night sky
Starry
many more stars

The reader wonders, 'Why?' In response the author says, 'The reasons for this difference (reasons signal the reader that causes for the effect are to be described; this refers to the previous sentence, and *difference* recognizes the existence of a contrast between the two kinds of night sky) may be (you see, he is not sure) . . . and then he continues to give three reasons, set off by commas and expressed in parallel form (*the amount . . . the clarity . . . the collection . . .*)

The author leaves a good deal of work for the reader, for he must think how much electricity is used in Delhi as compared with Nainital, how clear the atmosphere should be at 7500 feet as compared with 700 feet above sea level, and what the amounts and kinds of impurities might be in the Delhi atmosphere as compared with that of Nainital.

The evidence presented in this illustrative paragraph happens to be a contrast, but it might be a comparison or a mere statement of fact. It might be a whole paragraph of description followed by another paragraph giving reasons for it, classifying it, or suggesting a procedure by which the reader can create a like phenomenon.

In the case of the paragraph given here, the reader must emerge with the idea that one can see more stars in the night sky in Nainital than in the night sky of Delhi because in Delhi there are more competing light, and more impurities in a city and at the lower altitude. However, the author cared much less about Delhi and Nainital star-gazing than he did about factors influencing the clarity of the earth's atmosphere. The reasons are the variables to which the student must give great attention. The author might have used any number of examples.

So, when an author describes a phenomenon and follows it with an explanation, the reader must remember that the phenomenon is a means to an end. The teacher will hold him responsible for the reasons behind it.

To present a problem followed by a solution

One day we had to show some slides in a room with many windows. We might have waited until evening, but then some people would have had difficulty going home in the dark. So we asked several people to bring blankets to cover the windows. One person brought a hammer and another some tacks to secure the blankets in position. We took three solid wooden screens and placed them like an open box before the audience. The audience was seated with its back to two solid wooden doors. In this way the sheet on the middle screen was sufficiently shaded to show the slides.

The author's material looks something like this:

Problem: to show slides in room with many windows

Alternative solutions: show by night—no
show by day —yes

Need if shown by day

blankets

hammer

tacks

screens

sheets

Arrangement of these in relation to windows and audience.

In the paragraph the first sentence states the problem. The reader must know that slides require a bright light to be projected on a light surface that is in shadow, and that daylight in a room of many windows violates these requirements. 'Might have' in the second sentence

signals what wasn't done, and the 'but' gives the objection. The reader's mental 'So what?' is echoed in the 'So' which begins the actual solution. The steps in the solution were:

We asked for blankets.

(Assumption: these were brought)

Two people brought a hammer and tacks.

(Assumption: blankets were tacked up over windows)

We set up the screens and seated the audience in positions for maximum darkness on sheet. (Assumption: sheet)

It remains for the reader to evaluate this solution. Was it reasonable, efficient? What would he have done instead?

In this chapter using English examples we have noted the major types of treatment of which the brain of an English language speaker is capable, and have seen the results of these operations in paragraphs of expository English prose. Perhaps it is needless to say that each of these paragraphs could be condensed into a sentence or expanded into a much longer piece of composition. The important point for the reader to remember is that the unifying element in composition is the author's purpose, and that reading is efficient and effective to the extent that the reader is able to benefit by the signals which indicate the thought patterns being used. Expository Hindi prose needs similar analysis if readers of Hindi are to be helped to understand the thought patterns in that language.

READING COMPREHENSION

JUST AS reading is a name for a number of abilities specifically acquired, so comprehension is a convenient title given to a list of mental reactions to the printed material. When a textbook is being read, both mechanical and intellectual processes take place. Along with the mechanical process of vision, recognition and reproduc-

tion, intellectual processes of recalling, remembering, judging, appreciating, evaluating, etc. go on. The product of the mechanical processes is the technique and that of the intellectual processes is the comprehension.

Comprehension carries the understanding of a word or a phrase beyond recognition to the understanding of the meaning intended by the author.¹ This involves determining the meanings of words in their language setting and at the same time linking the meaning into larger language patterns and fusing them to a chain of related ideas, usually those that the author had in mind. Understanding a paragraph is not a simple task. It is like solving a problem in mathematics where the reader has to select, repress, soften, emphasize, correlate and organize all under the influence of right mental set or purpose in demand.²

Whether one is reading for knowledge and information or for sheer pleasure, demand for meaning is central. The skills of comprehension are basic to a grasp of the meaning. And the degree of understanding depends upon many factors, such as, the difficulty of the passage read, the clarity with which it is expressed, the reader's background and past experiences.

LEVELS OF COMPREHENSION

At the first level is word identification where the reader is mainly concerned with recognizing the word accurately. For example, on reading the sentence *Slow and steady wins the race*, the reader first employs many techniques (using structural or phonetic analysis and others) to get the words accurate. If he has need to figure out the word *race*, he may recall *acc* and *face* and then make out *race*.

1. Russel, D. H. *Children Learn to Read* Ginn, Boston 1961, p. 106.
2. Thorndike, E. L. 'Reading As Reasoning', *Journal of Educational Psychology*, Vol. 8 No. 6, June 1917, p.329.

At the second level the reader is getting a casual impression of the materials read. He may get a rough idea of the passage. Usually this is what happens when one skims through the material to find out what happened to the hero or how the hero came out in an episode. The information he gets at this level may not be very accurate.

Literal comprehension of the passage is the next level. Here one gets the main ideas by translating the meaning of words. To quote the above example, the reader gets the idea of the passage that slow and steadfast people can reach the goal faster, or if one goes carefully and with persistence one can win the race. There is a conscious effort on the part of the reader to get the main ideas or the specific detail.

Next is the interpretative level where the reader goes beyond the facts and reads between and beyond the lines. One may conclude on reading the above example that persistence is the main thing in reaching a goal and then wonder if any instance comes to the mind of people who had benefitted by persistent effort. Is it not true, one may ask oneself, of many people who reach nowhere because they do not work on continuously, diligently? There are two types of interpretative reading—critical and creative. It is creative when a person recognizes the implied and inferred meanings, enjoys and appreciates the beauty or the humour. It is critical when the reader is judging, setting a standard of norm, or checking to see whether it harmonizes with the sense of values and so on. The reader may accept the ideas or reject the relevancy of the material.

The impact of literature on the personality of people is also a higher level of interpretative reading when one feels he is not the same after reading a book or a passage or when the reader changes his actions or attitudes or his outlook on life. It is the power of literature on the personality of the reader. For example, the impact of the

writings of Rousseau and Voltaire on the French Revolution or the part played by Uncle Tom's Cabin in the American civil war or the effect of the Gita and other religious books on Gandhiji's life. All these interpretative levels may overlap with each other.

FACTORS INVOLVED IN COMPREHENSION

A number of studies have been done to outline the different factors in comprehension*. The factors and skills that are deemed most important are the following:

(1) *Knowledge of word meaning.* This is basic to the measurement of the other skills, since to read at all one has to recognize words and understand their meanings.

(2) *Ability to select the appropriate meaning for a word or a phrase in the light of its contextual clues.* This is a measure of reasoning in reading.

(3) *Ability to follow the organization of a passage and to identify incidents and references in it.* This shows the ability to focus on a writer's explicit statements almost to the exclusion of their implications.

(4) *Ability to select the main thought of the passage.* This is the ability to identify the author's point of view.

(5) *Ability to answer questions that are answered in the passage but not in words in which the question is asked.* This is the ability to figure out from the context

* Davis, F. B., 'Fundamental Factors of Comprehension in Reading', *Psychometrika*, Vol. 9, September 1944, pp. 195-197.

Pickar, J. A., 'Getting Meaning from Reading', *Elementary School Journal*, Vol. 56, March 1956, pp. 303-307.

Artely, A. S., 'An Appraisal of Reading Comprehension', *Journal of Educational Psychology*, Vol. 34, January, 1943, pp. 55-60.

Burkart, Ana, 'Analysis of Reading Abilities', *Journal of Educational Research*, Vol. 38, February 1945, pp. 430-439.

Robinson, F. H., and Hall, Prudence, 'Studies of Higher Level Reading Abilities', *Journal of Educational Psychology*, Vol. 32, April 1941, pp. 241-252.

the meaning of an unfamiliar word or to determine which one of the several known meanings is most appropriate in its particular contextual setting.

(6) Ability to answer questions on points that are specifically mentioned in the passage. This shows the ability to grasp the details of the passage.

(7) Ability to draw inferences from the passage about contents. This is the measure of the inductive process.

(8) Ability to recognize the literary devices used in a passage and to determine its tone and mood. This measures the specific knowledge of literary devices and techniques and probably reflects the influence of training in the language more than the other components do.

(9) Ability to determine the writer's purpose and point of view and to draw inferences about the writer. This is the ability to select the main thoughts in the passage and the ability to synthesize the meaning.

Comprehension is also influenced by the reader's purpose, his interests, his past experiences, his value system, his attitudes, attention given by the reader, and the difficulty of the concepts read. Authorities seem to agree on these points as the most important factors in comprehension, although here as well, some factors are more important than the others.

The numerous studies on the relationship between the general reading comprehension and reading comprehension of a specific nature show that the factors inherent in comprehension, though positively correlated, are not correlated enough to enable us to say that the ability to engage successfully in one type of reading is, by the same token, related to the ability to engage successfully in another type, or the command of one particular type of reading ability influences other types. Gates puts it this way, "The transfer from one type of reading to another is genuine and usually positive, but it is so small that it cannot be depended upon to develop desired abilities.

They must be specifically developed. We may accept with gratitude increments from transfer—but never a substitute for direct training.¹ These studies show the importance of teaching reading specifically in content areas.

The studies regarding the inter-relationship of comprehension skills suggest that word-recognition is a prerequisite to comprehension but it does not guarantee comprehension. Also, full recognition of all words in a passage is not always necessary for the degree of comprehension required. Experience, background, interest, and native intelligence partly determine how many and which individual words a reader may miss and still achieve comprehension. These studies also suggest that even though comprehension helps retention, retention in itself does not guarantee comprehension because one can remember verbally some material that he does not comprehend. These studies also point out that correlation between the rate of reading and quality of comprehension is positive, but not very high. So it cannot be interpreted that because a person reads fast he necessarily comprehends well. In fact, the good reader varies his speed according to the type of material and to the purpose of reading. But generally better readers are faster readers. These studies also bring out that the reader with poor comprehension generally is lacking in 'locational skills' such as selecting the main points, summarizing, making use of the index page, etc.

It is also pointed out that as comprehension is a complex of many skills a reader who has difficulty in some aspects of comprehension may not necessarily have difficulty with all types of comprehension.

So it is up to the teacher to discover the strengths and weaknesses of her students in comprehension and

1. Gates, A.I., *The Improvement of Reading* (Third Edition), Macmillan, New York, 1947.

help them accordingly.

CAUSES AND DIFFICULTIES IN COMPREHENSION

As reading is a highly intellectual activity, the level of intelligence of the reader is a major factor in comprehension. Many poor readers were found to have low intelligence quotients. However, this should not be interpreted that all retarded readers have low intelligence, or that difficulty in comprehension is caused only by poor mental ability. In fact, some children with high I.Q. were found to have difficulty in reading. Nevertheless, low intelligence is one of the major factors of poor comprehension because of the limited ability of the person.

Undesirable physical factors too contribute to the causes of poor comprehension, e.g. fatigue, malnutrition, inadequate lighting, noisy surroundings, etc. An over-emphasis on word-recognition and oral reading to the extent of only identifying and sounding out the word also causes poor comprehension. By paying too much attention to sounding out the words, children forget or neglect to pay attention to the meaning. Remarks such as 'I was only reading and not thinking' reveal how the child, in his effort to sound out and pronounce well before the class, forgets the major function of reading, viz. getting the meaning.

Insufficient background of the reader for reading a particular selection is also found to be a cause of poor reading comprehension. The ideas may be so new that the reader will not be able to get the meaning. There are no experiences he can recall which will give him clues or arouse associations with the subject. Poor language background, lack of readiness to pursue the subject, vocabulary deficiency, lack of knowledge of specialized vocabulary in the particular subject—all add to the poor comprehension. Also in each field the mean-

ing of a word is used in a special sense and unless the reader knows it, he finds it very hard to get the correct meaning. For example, the meaning of the word *root* in mathematics and in Botany. Too many and too difficult concepts when introduced in one passage also create problems in comprehension.

Poor concentration, lack of motivation, emotional factors are also reported as causes for poor comprehension.

Lack of ability to generalize is often found to be another cause especially in social studies, where skills in reading depend to a large extent on the degree to which the reader can arrive at sound conclusions and on the extent to which one can detect the errors in reasoning.

Failure to adjust reading techniques to the purpose and types of materials read is also found to be a cause of poor reading comprehension. If the reader uses the same technique for reading a science textbook that he uses for a novel, to get a specific detail and to get a general idea, naturally he can expect problems in comprehension.

DEVELOPING COMPREHENSION IN READING

The following are some suggestions for developing different types of comprehension skills:

- (1) To improve vocabulary teachers can
 - (a) extend vocabulary lessons over the year
 - (b) help children make use of context clues
 - (c) help children use the dictionary
 - (d) use different approaches for teaching vocabulary, such as, teaching subject-matter words, showing the connotation and denotation, teaching the use of idioms
 - (e) use synonyms, antonyms, etc., and stress not only the likenesses but also the differences
 - (f) make use of phonetic analysis

- (g) make use of structural analysis.
- (2) To develop the ability to find out the main idea teachers may ask students to
 - (a) find the main idea of a passage
 - (b) select one sentence that expresses the main idea of the paragraph from a list of sentences given
 - (c) state in their own words the main idea of the paragraph or selection
 - (d) underline the main ideas from each paragraph of the whole article after they have read the whole
 - (e) underline the words that best describe the character, action or plot, if it is a story.
- (3) To develop the ability to select significant details teachers may list a series of ideas and ask children to
 - (a) indicate where these ideas are brought out in the passage
 - (b) suggest which of the series of details support the main idea of a selection
 - (c) note as many details as possible to support the main idea
 - (d) answer questions on details in the paragraph
 - (e) complete sentences in which words are left out for testing the comprehension of details
 - (f) match a series of details with a list of ideas.
- (4) To develop the ability to make summaries and organize materials some of the following exercises may be given. Teachers may ask students to
 - (a) make a short report about the selection
 - (b) organize the main points as they occur in context
 - (c) group and classify items
 - (d) fill in the main topic and the sub-topics
 - (e) tell what is wrong with an incorrect outline which the teacher writes deliberately

- (f) arrange in correct order paragraphs dealing with one topic given in a mixed-up order
 - (g) write headlines for the bulletin board or chart
 - (h) make charts giving information about topics studied
 - (i) study table of contents to note the organization of a book.
- (5) To develop the ability to arrive at generalizations and come to conclusions teachers may ask children to
- (a) make and guess riddles
 - (b) check which ones of the several conclusions are warranted by data given and explain why unsound conclusions are invalid
 - (c) tell which of a list of statements are generalizations or to prove that a given generalization is unsound
 - (d) list facts heard or read that justify a given generalization.
- (6) To improve the ability to predict outcomes children may be asked to
- (a) look at the picture or context clues
 - (b) state what the outcome of the story is likely to be
 - (c) indicate on multiple-choice questions what is likely to happen
 - (d) discuss why a thing happened as they did in a story or article
 - (e) make up endings for stories, orally or in writing.
- (7) developing skills in evaluating what is read children may be asked to
- (a) decide whether a story is real or fanciful, giving reasons for the answer
 - (b) decide upon the purpose of the author
 - (c) indicate which statements are relevant and which irrelevant to a given purpose

- (d) locate inconsistencies in a series of paragraphs or a longer selection
- (e) think of incidents that illustrate the points when reading abstract materials
- (f) notice the cause-and-effect relationship, why certain things happened
- (g) indicate which of a series of statements express facts only and then to rewrite those that are purely factual.

The above are only a few suggestions to develop some of the most important skills in reading comprehension. Comprehensive lists of suggestions for each of the skills mentioned are given by Strang, Harris, Robinson, Loban, Deboer, Russell, Gates and many others.* Many teachers have found what is popularly called the 'S.Q.R. 3 method' to be a very good technique for helping the children to read with comprehension. Here the student may be asked to

- (a) first, survey the material quickly
- (b) second, draw up a series of questions for which he wants to find answers relevant to the topic
- (c) then, read the material thoroughly
- (d) next, review the matter again in terms of what he wanted to find out, thereby organizing the knowledge gained
- (e) finally, recite the main points.

For example, if a student is required to read a passage

* Harris, A. J., *How to Increase Reading Ability*, Longmans Green, New York, 1956, Chapters XV and XVI.

Robinson, F. P., *Effective Study*, Harper Brothers, New York, 1946.

Loban, Walter, et al. *Teaching Language and Literature*, Harcourt Brace, New York, 1961, Chapter V.

Deboer, John and Dallman, Martha, *The Teaching of Reading*, Holt and Rinehart, New York, 1960, Chapters V and VI.

Gates, A. I., *Improvement of Teaching Reading* op. cit.

Russel, D. *Children Learn to Read* op. cit.

Strang, R., McCullough M. C. and Traxler, Arthur, *The Improvement of Reading*, McGraw Hill Book Company, New York, 1961.

on Animals, he skims through the material first; then he might formulate questions such as

- (a) what type of animals does the passage talk about?
- (b) where are they found?
- (c) what are their habits?
- (d) how do people take care of them? etc.

The accompanying chart overleaf shows the different skills of comprehension and the grade levels at which they may be introduced.

Skills in Comprehension and Interpretation

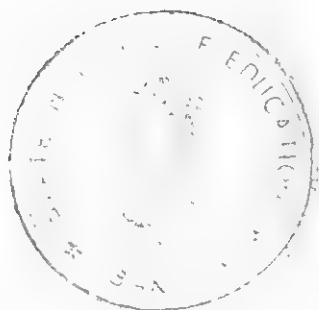
Grade

Skill

1 2 3 4 5 6 7 8

Discover a specific fact or facts								
Follow a sequence of ideas or events								
Events of a story								
Steps in a process								
Cause-and-effect relationships								
Note and recall significant details								
Remember what is read								
Grasp the ideas as presented								
Summarize and organize important ideas								
Gather, assemble, and organize ideas on a problem								
Follow directions given in reading material								
Read critically and evaluate what is read								
Anticipate outcomes								
React to the mood or tone of a selection								
Recognize emotional reactions and motives of story characters								
Consider ideas in the light of one's knowledge and experiences								
Draw inferences from a passage								
Distinguish between statements of fact and opinion								
Examine the support of statements made								
Reach broad generalizations and conclusions								
Read for main ideas								
The general meaning or significance of the selection								
The main idea of a passage								
The main idea of a paragraph								
Read to make comparisons								
Comparison of two or more versions of a story								
Comparison of two or more printed sources of information								
Grasp the organization of what is read								
The large thought divisions of a selection								
The structure of paragraphs								
The design of a writing								

Placement of Comprehension and Interpretation abilities:
 Detroit Public Schools, Detroit, U.S.A.



13

CONSIDERATIONS IN THE DEVELOPMENT OF A READER SERIES

TIME WAS when a person interested in developing a series of books through which children might learn to read simply said to himself, 'What method of instruction do I believe in?' and 'What stories did I enjoy as a child?' The answers to these two questions gave him the approach and content for his series. It is still

possible to develop a reader series in this way, but not for persons who know the newer discoveries and practices in the teaching of reading. What, then, might be called an enlightened approach to the development of a reader series?

Probably the reason for much criticism of the existing readers is that the task requires almost superhuman abilities. One must consider the expert knowledge of many fields: What would a sociologist say about the kinds of material to be used? What would the psychologist say about the methods and the content? What would the linguist say about the varieties of language used and the methods employed? What would the reading specialist say? What would the oculist say about the size of type, the spacing, the illustrations, from the standpoint of legibility and reader-fatigue? What would the literature specialist say about the content? What would the artist say about the art education being given through the illustrations? What would the evaluation expert say about the way skills are tested and used? What would the economist say about the impressions given of various occupations—agriculture, business, government, and industry? What would the village parent say about the stories used; the city parent?

It would be easy enough if it were not for three unfortunate facts: (1) Usually it is impossible to obtain expert opinion in all of these fields. (2) All experts in a given field do not agree; a person may please one expert and outrage all the others. (3) The desires of one expert in one of these fields are somewhat opposed to those of other experts in the other fields and so it is not possible to please everyone completely; a compromise must be made. A reader series is a result of many decisions to reconcile differences. Whatever the decisions, it will inevitably be a target for criticism from many sources. If it were not of utmost importance for

millions of children to learn to read successfully, no one would be so foolish as to put himself in the position of a veritable duck in a shooting gallery.

Probably it should be said here that even a person who does not consider all these things, unconsciously makes decisions about them. For example, if the book contains only stories of the past, the compiler has unconsciously turned children's minds to the past. Is the past the only thing worth reading about? Should the present be completely unrepresented? Is the dominant Indian point of view to be, 'We had a wonderful past'?

The following are some of the considerations which are involved.

VALUES

If it is true that one is a product of all that he has experienced, it is important that the ideas received from the reader designed for children in a democratic nation should be consonant with the ideals of that nation. How can those ideals be determined? According to contemporary Indian writings, the various peoples of India have various sets of values—principles by which they live. The problem is to identify those values which are best for the achievement of the goals of this nation.

One educator when approached about this question said, 'We should educate children to know that they have certain duties and certain rights; that they must follow certain hygienic practices and maintain good health; that in their dealings with other people they must be sincere, honest, tolerant and able to adjust to new conditions; and that as scholars and observers of life, they must develop a scientific attitude.' Would you agree with him?

Some of the values gathered from literature are as follows:

Habits of work:

ambition

working directly towards a goal

having a challenging objective

acceptance of hard work as consonant with education (not education as a way out of exertion)

resourcefulness

Habits of Thought:

thinking for himself

reasoning things through

experimenting

investigating

hoping for a better life which he himself makes possible

Social Attitudes and Behaviours:

sharing (generosity of spirit)

cooperating

feeling responsibility for the welfare of others—
seeing his role beyond self-maintenance

respecting the property of others

respecting parents

respecting laws

respecting work—a job well-done

The social studies syllabus recently published by the Department of Curriculum, Methods, and Text-books of The National Council of Educational Research & Training stresses such values as:

mutual understanding and trust

cooperative effort for effecting change in the pattern of living

acceptance of responsibility to group

dedication to the preservation of freedom of India

obedience to law and order, authority

appreciation of and respect for elders, teachers

care of personal and public property, natural

resources

respect for people of varied religions and cultures in India.

Values have to do not only with behaviours and attitudes within the nation but with the relation of India to the rest of the world. Indians with vast experience who have also held responsible positions in government have ideas to offer on national integrity, non-violence, arbitration of differences, and the blocking of aggression. Consultation of the works of Gandhi, Nehru, and Radhakrishnan, for example, should be productive of a list of values subscribed to by these outstanding Indian leaders.

One may ask how values are expressed in the stories, poems, or other literary forms which may be included in a reader series. Here is an example: There is a story of a man who beat his donkey cruelly. The donkey could do nothing about this, but he could stand the punishment no longer. So he decided to dress himself up in a tiger skin and frighten his master. This he did. His master was thoroughly frightened. However, his master noticed the donkey's hooves protruding from beneath the pelt. In a rage he whisked off the disguise and gave the donkey the beating of his life.

Now, one might include such a story in his book, saying that it expressed the value that one should not be deceitful, whatever the provocation. Unfortunately, however, the story indirectly condones cruelty to animals. Should children grow up to think it is all right to torture the animals who bear their burdens and give them sustenance? Many favourite old stories in this manner condone cruelty, killing, theft, as means to desirable ends. It is necessary to analyse the classics carefully if the selection of stories is to support, rather than detract from, national values.

VOCABULARY

When anything new is to be learnt, ordinarily the teacher tries to minimize the difficulties which may impede the learning. For example, if a father is teaching his son to ride a bicycle, he will ordinarily choose level ground and a place without other traffic. In learning to read, the same principle holds. Everything should be made easy for the hard job of reading the symbols. For this reason the reader starts with words whose meaning the child knows well, words he has not only heard but has spoken himself, words he knows how to use, words representing things in his own experience.

Later, when the child has learnt to read material of this sort and now knows many words, words that he has never himself used and words which he has never heard or seen may be used in sentences which employ the words he knows. If each unknown word is buttressed with words he knows and is used in such a way as to reveal the meaning of the unknown word, the child can learn the new word—both its form and its meaning. In this way the reader series can advance from the child's spoken vocabulary to a broader vocabulary.

Hence there are a few very important questions about vocabulary which the author must settle:

(1) What is the spoken vocabulary of young children ?

If the author is writing the books for a village, he must find out the vocabulary of children in that village. If he is writing for a city or state, he must sample the vocabularies of children of this more varied background. If he is writing for several states, he must sample the vocabularies of children from those states and determine the words common to the experience of all those children. If he finds that a certain word is necessary to his book but is not found in the common vocabulary of

the children for whom the book is designed (perhaps they use twenty different dialect words in place of the one in the prescribed language), he may use it and recommend to the teacher ways of having the children use the word in meaningful speaking activities prior to the reading of that story in the book.

(2) How does this spoken vocabulary develop from one level to another ?

If the author is designing material for the first five standards in the primary school, then he needs to sample the vocabulary of children of those standards. He may do it by tests, by interview, by taking stenographic notes on the informal conversation of children. Whatever he finds will present a problem. If about forty per cent of children in the first standard drop out of school at the end of the school year, it can be supposed that probably the remaining children are the more able. Therefore the sampling at higher standard levels represents a select population. If a new reader series makes possible the promotion of more children to the second and higher standards, then perhaps children of less linguistic facility will be in school at those higher levels. Perhaps whatever is put into the books at the higher levels should be easier than what the present sampling would suggest. On the other hand, if the reader series is planned better, perhaps children will be better readers and more advanced in vocabulary at the higher levels. This is just one of the knotty problems facing the author.

(3) What are the vocabulary demands of the curriculum at successive levels ?

The author needs to sample books in social studies, health, science, etc., to see what children are required to read in those fields in the different standards. Certain technical words are not the responsibility of

the reader, for it is inefficient and impossible to introduce all such words in the time given to reading instruction. The teacher must deal with science words in science lessons. But the general vocabulary of the textbooks in the content fields must be sampled, so that the author of the reader series can introduce as many of these as possible.

It is quite possible that textbooks in the content fields have not always been carefully designed in vocabulary, that actually the general vocabulary used is too difficult and should be simplified in revisions of the textbooks. This too the author should consider as he decides what to include in vocabulary in his reader series.

(4) What standard vocabulary is the goal of the reader series?

The author must also decide upon the vocabulary which is his ultimate goal. For example, if the language used is Hindi, *khari boli*? The Hindi of business or the Hindi of poets? Whatever his decision, he must choose from that standard the words he will most certainly try to introduce in his reader series, and keep them in a list to which he constantly refers as he chooses the language for the various levels.

(5) How often must a word be repeated to be remembered?

Words are learnt by being seen in many contexts, and being seen frequently enough after the first learning so that they are remembered. If the word is a very useful one it will naturally occur many times without special effort on the author's part. However, a less useful word will require planning for its reappearance in later lessons in a book or series of books.

'Basal reader' series in the United States repeat a new word deliberately three or more times in the story in which it first occurs, there are further repetitions in

the remaining stories in the book, and still further deliberate ones in the succeeding books. Thus a child not only learns a word but has deliberately planned help in retaining it.

Many readers used at present in India do not practise the repetition of words introduced. While they introduce a great many words (many more than a comparable book with planned repetitions), many of the words are not retained by the child, and many are not seen enough to be remembered as an instantly recognizable, total form.

Experiments in classrooms with some of the actual stories from the proposed reader series can show whether or not the word-load is too great or too small, the repetitions sufficient or not.

(6) What policies are desirable in regard to choice of words?

(a) Suppose children use a word which is not considered acceptable in the adult vocabulary. Should it be used because it is natural? Should it be eliminated because it will further embed a bad habit? Should its use be avoided? For example, a natural use of English is shown in this exchange: 'Are you coming with us?' 'No, I am't going.' The question is: Should 'ain't' be used? Should it be left out ('No.')? Or should it be circumvented ('No, I don't want to.')?

(b) Suppose there is a word like 'up', in English, which has many meanings and many uses. Should all the common uses be introduced, together or separately? If separately, in what sequence? One reader series in the United States which introduces 'up' in its first book uses 'up' in one story in the expression 'up the steet', in another story uses it in 'up the stairs', in another in 'hold me up to the drinking fountain', yet in another with the balloon that 'goes up'.

(c) What responsibility will the author take for

the fullness of meaning of words like home or democracy or camel? In a story he may introduce one kind of home. But will he suggest that the teacher develops the idea of home in a discussion of different kinds of homes which human beings and other animals have? Will the teacher ask what children think of when they think of home (warmth, comfort, kindness, help, a place of their own, etc.)? For democracy will the story or the teacher deal with its various manifestations? For camel will the story or teacher do more than define a camel (what it looks like, what it can do, how it works, what it needs to live, what its habits are, what sounds it makes, how its hair feels, what uses man has made of it)?

(d) Should words for the first book be chosen only for their presence in the spoken vocabulary or also because they are easily written, because they are useful in teaching certain letter sounds and certain principles of word structure? Will some words have to be included because they are common, despite the fact they are hard to write or are irregular in structure? To what extent should an old story be altered in wording to suit the controlled vocabulary? Are there some words which the flavour of the story demands?

THE LANGUAGE

The characteristics of the language in which the books are to be written is another consideration. What experiences with the language should the child have through the medium of the readers? What distinctions in vocabulary should be sampled? For example, English has many prepositions to suggest relationships, while Hindi has relatively few, depending upon context to designate which of several meanings a given preposition (or postposition) has. On the other hand, Hindi has special words to designate the relationships within the family, whereas English has to resort to

descriptive terms to designate which grandfather, which uncle, which cousin of which sex is meant.

The variations in verb-form may include separate forms for different sexes, degrees of respect, number (singular or plural), person, and tense. Which of these should be taught first? How many of them are common enough to be included in the primary series?

What forms do the nouns take? Are there types of nouns in regard to structure (prefixed, suffixed, compounded)? What are the relationships among nouns (abstraction, generalization, specific, part etc.) What of adjectives and adverbs? Can they be classified by form and what aspects of life do they reflect or mean? Which of these are most crucial to the primary vocabulary? Which are used extensively enough to deserve a place in the first book in the series?

What words operate as conjunctions? What relationships do they establish between two sets of ideas? Which ones are worthy of early introduction because of their extensive use? Which ones might be delayed until later books in the series?

What sentence structures are common in the language? What are the grammatical rules to be observed; what grammatical habits are to be established in the learner? Which of these sentence structures are common enough and simple enough to be included in the first book?

What words common among young children are not used in adult life? Which of these should be used in the early books in the series? If they are used, when should the standard substitution be made? With what formal uses of language should the child become acquainted? For instance, should he learn a more respectful way of addressing adults than he is perhaps accustomed to using in his home?

A special problem arises in different forms to be used in addressing respected persons, children, em-

ployees, and animals. Are these distinctions appropriate in the textbooks of a democracy? If not, will the conversational material in the books seem unnatural to the reader? Another decision for the author!

What sounds and sound-sequences are characteristic in the language? Which ones are difficult for children? If a child speaks a different mother-tongue, what sounds will be hard for him to hear and produce? Which common words contain these sound elements? What positions do the speech organs take for their production?

What punctuation marks or other forms used in the written form of the language, should be introduced? In what order?

What are the shapes of the written symbols in the language? Can they be classified in regard to ease of writing? Can they be classified in regard to frequency of occurrence?

What larger units than the sentence (paragraphs, chapters, etc.) are used in the language? How are they designed? What clues does the author give the reader to this design? For example, in English, the words *first*, *second* . . . *last* are some of the clues frequently given in the enumeration of items which are either parallel in classification or are in chronological order.

KINDS OF THINKING TO BE FOSTERED

Reading is a thinking process. The reader must be able to think with the author and bring his own thoughts to bear on the subject. If the child does not have experience in hearing logical and chronological presentations (telling a story, adding to a discussion), he brings an undisciplined mind to the reading act.

Fact reading and the answering of questions by repeating what has been read fosters accurate reading but militates against thoughtful reading. People in a democracy must read thoughtfully, evaluatively. Teachers

can encourage such reading habits with questions and tasks which require different types of thinking about what has been read or is about to be read.

Therefore, the author of a reader series must plan the kinds of thinking which he finds are possible in the language with which he is dealing, the literary forms which it has produced. His selection of materials for his books will be partly determined by their stimulation of thought.

Are the literary forms of his language such as these?

- letters
- business
- informal
- informational material
- events
- logical exposition
- instructions
- stories
- poems
- dramas

Are the types of thinking possible in his language and in these types of literary form, such as these?

- generalizing
- summarizing
- classifying
- seeing relationships
 - whole-part
 - subordinate-coordinate
 - chronology or sequence
 - cause and effect
 - comparison and contrast
 - relevance
- predicting outcomes
- drawing conclusions
- evaluating

ATTITUDE TOWARD READING TO BE FOSTERED

A reading programme is a failure if the child who is taught to read never reads. A reading programme is a failure if the child thinks of reading as only word-calling and the imitation of a teacher's expression. A reading programme is surely a partial failure if the child does not learn to value his culture and to appreciate well-written material in his language.

Therefore it is important to consider what attitudes towards reading should be fostered:

reading as entertainment

as literature

as information

as provocative of thought and action

as a bridge of time and space

as communion with the best artists and
the best minds in the history of the so-
ciety and the world.

Once these attitudes are determined, the author of a reader series must plan ways in which these attitudes are to be fostered. If he leaves this planning until the readers are completed, he may find that the contents and the teaching activities actually militate against the desired attitudes. If he plans ahead, he will see to it that suggestions are made to the teacher to read aloud well-selected literature for children, that materials for the books will be chosen partly for their literary quality and depth of meaning, that supplementary reading material will be published or, if already available, recommended so that children will use their reading skills and develop the habit of reading for various purposes.

As an example of the practical meaning of this concern, suppose the author wishes children to know that different authors have different points of view and different sets of facts to offer, and that a reader who would defend himself against narrowly-conceived pro-

paganda must read more than one author on a subject and compare the ideas and weigh the validity of each opposing set. If this is the wish of the author, should he not put into his books occasionally two or more compositions on the same subject but by different authors? Should he not direct the teacher to ask questions about the ways in which the selections differ, why the authors came to different conclusions or why the reader did, and what more needs to be known before a judgement can be made on the rightness or wrongness of their views?

Suppose, the author wishes children to read beyond the surface of a story, to make, as it were, depth plunges to deeper meanings should he not, then, choose a story that has a deeper meaning? And should he not suggest that the teacher ask questions beyond the surface? If the story is of the crow who had something to eat and the fox who wanted it, should the teacher be satisfied with the answer that the story is about a crow who lost his food because the fox asked him to sing? Why did he listen to the fox and forget his food? Our foes may flatter us to our misfortune. Our foes may win something from us by preoccupying us with something else. One of the methods of deception is an appeal to vanity. Pride goeth before a fall. What personal instances of this truth can we think of?

CHILDREN'S INTERESTS

Children learn to read more easily if the material is meaningful to them and if they are interested in the ideas and/or the way the ideas are expressed. Therefore, books which deal with ideas familiar and interesting to children will be more successful teaching tools than books which deal with ideas unfamiliar and uninteresting from the children's point of view.

Children's interests are determined partly by the

environment and partly by biological needs as children mature. A six-year-old has different interests from those of an eight-year-old. In some countries, sex, socio-economic status, age, ability, culture and the educational level of the parents strongly influence the interests of children. It is important to know what is true of Indian children. Studies so far made in India have been too limited in sampling and/or too specialized in method to provide the data the author needs.

ORGANIZATION OF THE MATERIAL

Another decision the author must make is the organization of materials within the book and from book to book in the series. Within the book it is common practice in some countries to have the contents organized in units, perhaps three to eight units per book. These units are on topics such as At School, Animals We Like, Children of Other Lands, Old Tales. Within each unit are several stories, articles or poems dealing with the topic. This organization makes it possible to pursue a topic in depth and to relate the contents of the book to some of the social studies and science learnings of the curriculum for that standard.

The variety of topics within the book has to be determined. Shall it be topics of known interest to the child? If so, will some of the selections deal with science, social studies, humour, classics, children's problems and activities? Will biographical materials be included? If a study of the interests of children shows that the potential readers of the book have marked sex differences in choices of reading material, what proportion of the book should be designed to please the boys, the girls?

If the books are to correlate well with the social studies syllabus, perhaps the stories for the first standard will centre around the home, the school and the imme-

diate neighbourhood; for the second, around the village or city; the third, around the state; the fourth, the nation, and the fifth, the world.

CONTENT

Again, if they are to correlate well with social studies, the major concepts and attitudes to be taught in the various standards should be supported in the selections in the readers. The same would be true for science and health. What are the major goals in the teaching of these subjects in modern India? What are the recommended agricultural practices which could be impressed upon the reader through stories which incidentally but prominently feature them? What are the desirable practices in social life, in public works, in health, in business?

If the child is to learn how to read social studies material by means of the reader series, then some of the selections must be written in expository style as social studies material usually appears. If, however, it is planned that the teacher of social studies will teach the reading of social studies material in social studies lessons, then the related material in the reading book can be of the story type.

If it is important for a child to develop a sense of humour, then humorous stories and poems should be included. If the past has much to offer, then certainly selections from the classics and about the past are in order. Some authors develop a whole unit on humour or on the classics. Others put humorous selections or classic selections into units whose topics they fit. Unless the purpose is to compare types of humour or classical stories, the latter arrangement seems more sensible.

Religion and politics are touchy problems for the author. If the children who will read the books are from one religious group, then material on that reli-

gion, on its festivals and practices and literature, is in order. The author must know his clientele well to decide whether a unit on Religions Around the World, or a unit on different political beliefs, is advisable.

Another decision on content has to do with the presence or absence of questions and exercises in the text itself. If the questions and exercises are in the book, the children and teacher are sure to see them and less apt to skip over them than they would if the activities were listed in the teacher's manual.

What else will be in the book? Suggestions for other books to read? Tests? A vocabulary list? A glossary of hard words?

What will be in the teacher's manual? Should it contain the book itself as well as directions to the teacher? Suggestions for books and magazines which the children can read?

What other materials should be provided or suggested? Letter cards? Word cards? Charts? Readiness tests and achievement tests? A flannel board? A pocket chart? A pupil's work-book or record-book? Games to reinforce learnings? Materials for independent work?

Once the author has decided the kinds of material he wishes to put into his books and teaching aids, he must go in search of them. And it should be clear by this time that the author cannot be alone in his task but must have the help of many persons. If his books are to be in Hindi, he must comb the Hindi literature for children to see what selections would fit the unit topics and whether they would be in keeping with the values to be promoted. If his books are to profit by literature in other Indian languages and in world languages, then he must employ scholars who know these languages and who know children's interests to explore the possibilities. When they find promising selections, they can report them.

The author then chooses the selections he thinks suitable for various units and standards. After this, he has three problems. One is to find Hindi writers for children who can do more than merely translate the foreign literature into Hindi; they must be able to write as artistically as the original author and to retain the flavour of the original piece. The second problem is to find Hindi writers for children who can invent suitable stories for the units which have not been completed through the use of existing literature. The third problem is to control the vocabulary so that each page of a book adds only one or two new words to the vocabulary and also repeats previously introduced words, without violating the spirit and cadence of the prose. Ordinarily poetry is made an exception to this rule and can be so because the teacher reads the poem to the children prior to their reading it to themselves, whereas prose reading is initially silent reading by the children under the teacher's direction.

It should be noted that, in English, reading specialists estimate that one new word per hundred running words is easy reading. As children learn to solve words for themselves by sounding them out, studying their structure and discovering their meaning partly by their use in the sentences in which they are introduced and repeated, more new words per hundred running words can be risked. Also, as there are more words on a page of 12-point type than of 36-point type, two words may be introduced on the former page without undue difficulty for the child.

But the numerical approach to reading difficulty cannot be the only criterion. The author must assume the child's point of view as he views his work. In the sentence, 'We had a very—time at the party,' where the new word is unknown (indicated here by the blank), the meaning of the word is crucial to the meaning of the sentence; if, however, the sentence is 'We had a—

good time at the party,' the chances are that the word which is new is an intensifier rather than a word of such meaning as 'scarcely', and the sentence-meaning is relatively secure.

If the author uses contextual helps for the meanings of the new words, he can afford to introduce more new words per hundred running words. However, he must realize that a new word must be seen in many contexts before it becomes an established 'personality' to the reader. Each child has his own limit of new words to be tolerated even in prose well-buttressed with contextual clues.

What skills of reading are to be taught through the materials? Some indices in modern reader series contain as many as two hundred listings of different skills. What skills does the author think are necessary for the 'full reader' of modern India? In what order should they be developed? What are the graduations of difficulty in developing a skill? Which skills require which other skills? Many classroom experiments will have to be tried before the answers to these questions can be anything but guesswork.

When the skills have been determined with reference to their sequence (if any) and gradation, the next question is related to the methods of teaching these skills. How do children learn? But even more important, what do they learn about learning and what do they do as they learn? Do they learn ways of self-instruction? In large classes this is important. Do they learn to think for themselves, to draw their own conclusions on their own observations, or, depending completely on the teacher, do they learn to wait for someone else to do the thinking for them? In the long run, what will the latter type of experience mean for democracy in India? The author must realize that his judgements about methods and skills and content will not only affect the success of his materials but the

future of his country. 'As the twig is bent, so the tree is inclined.'

One of the hardest questions an author has to answer about content is the level of difficulty of successive books in the series. What makes a book hard? How hard can a book be and still make learning possible? How much harder must the book of the next standard be? What is fifth-standard difficulty?

An author might try to answer these questions by looking at the books by his competitors; but they are only guessing, too. They cannot be his criteria. One answer which is used in India is to design materials and try them out on children of different standards. The selection of children must be representative of the potential users. However, children taught by one method may do badly on the materials using another method because the approach is strange, not because, in a total sequential programme, it would be impossible.

Basic research in English has made it rather easy for the author of an English reader series to determine the difficulty of his materials. There are actual formulae which he can apply—assessing the lengths of sentences, the number of prepositional phrases, the proportion of rare and common words (lists of which are available), the presence of prefixed or suffixed words (which tend to compress meanings), the frequency of referent words (he, her, who). There are lists of technical words or specialized words which make material difficult. There are survey tests of reading vocabulary and comprehension. The author can use the survey test as a yardstick for his selections. Or he can make a test of his selections and see at which standard levels most children are able to respond correctly.

THE LAYOUT OF THE MATERIALS

If the materials in the series are to include charts and cards which are to be read by a class at a distance,

the size of type and picture must be discernible at the farthest distance. The colour of the paper and of the print partly determine legibility. Size and style of type, spacing and leading are other factors.

Desirably the book lies flat so that the reader does not have to read a curved page. The paper is off-white and dull in finish, so that glare is avoided. The print is black enough to present a clear contrast to the paper. For children the optimum length of line is about four inches with sufficient spacing between words and lines so that moving their eyes from the end of one line to the beginning of the next they do not miss the mark.

Judging from findings in other countries and in India the size of type in Hindi for children under 7 years should be 36 point; for children between 7 and 8 years of age, 24 point; 8 and 9 years, 18 point; 9 and 10 years, 16 point; 10 and 12 years, 14 point; over 12 years, 12 point. The style of type should be highly legible so that the identity of similar letters is not confused.

Particularly for young children, the paper should be sufficiently opaque so that the shadow of print on the back of the page does not show through. Lines of type in the first book should not be justified (that is, the words should not be spread out with variant spacing so that all lines are of equal length regardless of the number of letters in each line). The jagged margin on the right end of the line helps the child in his shift from one line to another. The margins of the page should be wide enough so that the child does not cover up the print as he holds the book. The illustrations should not interfere with the print.

EVALUATION

Finally, the author must provide for the teacher ways of finding out the needs for teaching and the results of teaching. Some of these will be through ob-

servation, and some through tests which the author will design and place in the book, the workbook, the manual, or in a separate leaflet. Observation and testing in themselves are of little help. The author needs to say what the teacher should do in the case of certain results. Interpretation of possible results and suggestions for remediation are his responsibility.

Again, how is the author to know that his tests are good, that they do what he claims for them? He must try them out. He must have the cooperation of many teachers who are using his materials experimentally, in testing and reporting results to him.

Anyone who enjoys a particularly long and complicated process which, at the end, will reap him a great deal of criticism as well as a great many friends, should consider the development of a reader series. It will require the best that he has to give. The real test of the worth of the task is whether the author's efforts will result in instructional materials much better than those previously produced by others. For, the whole point of the venture is not to prove one's ability to produce but to prepare children better for the reading world.

BASES FOR EVALUATION OF A READER SERIES

Validity

1. Is it a realistic expectation that children who have gone through the book and teaching materials as they were designed to be used will develop power in reading and a desire to read more?
2. Has research preceded or accompanied the development of the reading series to validate its content and methods?
3. Has the evaluation of this programme been based either upon actual tryout with pupils or upon the judgement of teachers as to their feasibility?

Content

4. Does the reader present characters with whom the child can identify himself?
5. Does it reflect Indian life, leading from the present which the child knows to the past or remote?
6. Does it reflect the best in Indian and world literature?
7. Does the translation of world literature do justice to the quality of the original?
8. Does it reflect the ideals of the society without being unrealistic?
9. Is it interesting to children of the age group for which it is intended?
10. Does it inform as well as entertain, giving the child a greater self-knowledge, and a greater understanding and appreciation of his environment?
11. Do succeeding volumes reflect the expanding world of the growing child?
12. Is there clearly some attempt to correlate the readers with the content and goals of the other subject areas in the curriculum?

Physical aspects

13. Is the book suitably durable for the use it is to have?
14. Does its appearance attract the reader of the age for which it is intended?
15. Is the paper thick enough not to show print on reverse side?
16. Is the paper off-white and dull in finish, without glare?
17. Is the print black enough to make a clear contrast with the paper?
18. Is the print large enough for the ocular accommodation of children learning to read? (36 p^t. in Hindi for first standard).

19. Is the type highly legible, so that letters are not confused with one another?
20. Is the print placed clear of the illustrations?
21. Is the page artistically balanced?
22. Can the child hold the book without covering the print?
23. Does the book open flat, so that the child is reading a flat surface?
24. Is the teacher's manual easy to use in relation to the child's book?

Illustrations

25. Are the illustrations an aesthetic experience for the child?
26. Do the illustrations assist the recognition of words?
27. Do the illustrations help the child determine the identity of the speaker whose words are in the text for that page?
28. Do the illustrations assist the text without completely 'stealing' the verbal content? (i.e. without making the words superfluous).
29. Are the illustrations expressive of mood as well as thought and action?
30. Do the illustrations attract the child by the use of colour?
31. Do the illustrations portray common elements of culture rather than the differences?

Language

32. Does the series utilize the basic vocabulary in the language, starting with the forms which children hear and use?
33. Does it present the common sentence structures, grammatical structures and word inflections, beginning with simple, common forms and proceeding to the complex? (Note: Simple is used here in a general way, not in reference to simple sentence as compared

with complex.) (There is such a thing as a simple, common complex sentence, simple because it is not an involved example, common because it is used often in speech of children and adults who converse with them).

34. Does it use the punctuation required by the contents?

35. Does it present words containing letters easy to write, and proceed to more difficult forms?

36. Are new words presented gradually and repeated often enough to assist learning? (repeated not only in the same story but in later stories and later books).

37. Are words of multiple meanings presented with one meaning at a time, so that the child is not confused?

38. When one of the two common words might have been appropriate in the text, has the choice clearly contributed either to repetition of something learnt or to the development of a new learning?

39. Do sentences, paragraphs, stories increase in length and complexity throughout the books in the series, presenting more and more challenge to established skills?

40. Has some attempt been made to gear this increase to the language, interests, and reading ability of the majority of children of the grade levels concerned?

41. Is the Primer language informal and natural without being undesirable?

42. Has the author avoided introducing easily confused word-forms in the same lesson. (General practice should be that one form be introduced; then, in a later lesson, another form; then, the two to be differentiated).

Teaching Materials

43. Do the teaching materials provide for the assessment of readiness for new learnings?

44. Do they provide exercises for the development of readiness?
45. Do the teaching materials teach the care of the book and the use of the book (such as reading table of contents)?
46. Do they put the burden of active learning on the child, by such means as:
 - asking for picture interpretation
 - asking for generalization and induction (What part is the same?)
 - asking comprehension questions which require thought rather than mere 'finding the place that says it'
 - having the child retrace the steps in his own learning in a written record which he keeps and use what he has learnt
 - using the alphabetical arrangement of words in a dictionary of words occurring in the reader?
47. Do the teaching materials establish quick recognition of a word at sight, as well as the recognition of letters in new words?
48. Are there cards and charts which provide practice in word, phrase, and sentence recognition outside the book itself (so that sheer memorization of pages does not subvert the learning programme)?
49. Do the teaching materials provide for the assessment of the child's needs and achievement?
50. Do they provide for silent as well as oral reading?
51. Do they provide for skimming exercise ('Find the place that tells—'?)
52. Do they encourage children to think in many ways about the material they read (a) by setting a question before they read and (b) by setting questions and related activities after they read?
53. Are there suggestions for children who are slow to learn and children who learn rapidly?

54. Do writing, speaking and listening activities support the reading programme?
 55. Are discussions and other activities suggested for emphasis upon incidental learnings in the content fields?
 56. Are the learnings carefully built, one upon another?
 57. Is the skills development programme of the primer as broadly conceived as that for the higher levels (a programme for growth in word-form, word-meaning, comprehension, interpretation, and study skills)?
 58. Are skills taught, not just assumed and required?
 59. Is the child given opportunities for self-evaluation?
 60. Is the teacher encouraged to observe individual child behaviour as well as to test for growth?
 61. Are the tests broadly conceived; not simply limited to letter-pronunciation or word-calling?
 62. Are directions to the pupil, which he is to read for himself, written in words he can understand and clearly expressed?
 63. Are directions to the teacher sufficiently simple, clear and detailed, even in some cases illustrated by pictures or diagrams, so that the novice can follow them?
 64. Are additional teaching aids which are not provided, but are suggested or required in connection with activities in the learning programme, easily and cheaply available wherever the books are likely to be used?
-

CHILDREN'S INTERESTS

REPORTED HERE is a summary of the ideas gained at a panel discussion on this subject.

Interest is a matter of giving keen attention to something—an object, an activity, an idea. While there are certain interests common to groups of people, interest seems to be a highly personal mat-

ter, depending not only upon the availability or presence of the object of interest but upon the person's awareness of it and feeling toward it. Two children can be sitting on the ground. One stares out into space—perhaps thinking of his interest or wishing he were elsewhere—while the other examines the soil for its composition, its possibilities as a design medium or the insects traversing it. A bullock cart passes. One child may not even notice it, or think, 'The same things happen every day.' Another child may be fascinated by the animal, the cart, the driver, or the load.

HOW DO WE DETERMINE CHILDREN'S INTEREST?

To discover children's interests, the teacher cannot spend all of his time lecturing and getting back what he has given. The best way to find out what children are interested in is to give them opportunities to express themselves—in art, in pantomime, in speech. The teacher can listen to the children's informal exchanges of conversation with one another. He can engage a child in conversation before school, during intervals between classes, after school as the child gathers his possessions to go home, on the street in chance encounters. He can ask the parents about the child's activities.

By reading stories to children and watching their reactions (attention, inattention, 'Tell it again!') the teacher can note the subjects, the plots, the characters they find attractive. By asking what they liked best about the story, the teacher finds out whether humour, surprise, companionship, etc. were especially appealing to the children.

Children who can express themselves in writing can be asked to write down each day in class what they did after school yesterday and this morning before coming to school. Such a diary, kept for a week, reflects the life the child leads: both a suggestion of his interests

and a clue to starting points for interests he has not yet developed.

Questionnaires can be used, and systematic interviews also. They, however, have a drawback. The child is likely to say what he thinks the teacher wants him to say, suppressing what he considers the teacher's taboos. Even so, the points he chooses to make are probably closer to his real interests than those he does not make which are also not his real interests.

If at the first of every school day the teacher asks for any news the children wish to exchange with each other, children will report happenings which they think newsworthy and interesting. If a classroom newspaper is 'published' once every two or four weeks, the reporters will contribute their favourite items—their reports, stories, or poems on topics of their choice.

If the school has a spare room to which children can go once a week—a room full of books and displays and materials with which to work—the children's choices will reveal their preferences and extend their interests as well. If children are permitted to tell others about the books they have enjoyed, the experiments they have made, what they are collecting, the teacher learns and the interest is not only expressed but spread.

ARE THERE AGE DIFFERENCES IN INTEREST?

Numerous studies of children's interests have shown that children of different ages have to a certain extent predictable and different interests. Studies in the United States provide extensive coverage of these differences for different age groups. Indian studies have tended to be of a particular level or grade, in different states and situations, so that it is not yet possible to state what the interests are for children of a given region at successive ages.

The foreign studies suggest that children's interests

are dependent upon their environment. As the child grows up, he becomes aware of a larger world than his home: his street, his village, his state, his nation, his world, his universe. Radio and cinemas, as well as books and newspapers and magazines, have altered this picture, but the general trend remains.

Foreign studies further suggest that changing social and biological needs and tasks influence the child's choices. When, in the United States, children aged 9 to eleven become concerned with clubs (organizations) and with the need for group approval, they tend to be interested in anything which they can see will help them to understand their roles as members of a group. When the young child has developed the muscular control to direct his arms and legs accurately, he becomes interested in games of skill in throwing, running, kicking.

Interests are made possible at different ages, also, because of new learnings. In the United States children of junior high school age as a group read more widely than they perhaps ever will again in their lives in the same length of time.

ARE THERE SEX DIFFERENCES IN INTEREST?

To the extent that a culture has different expectations for boys and girls, involving them in different activities, offering them differing amounts of adult attention and opportunity, there are sex differences in interest. Beyond this, there are probably biological reasons for girl interests in home activities and boy interests in aggressive, competitive play and work outside the home. A female docility appears to make it possible for girls to enjoy books designed to suit boy interests, whereas most boys find the books designed for girls intolerable.

It has been found to be universally true that both

boys and girls as very young children, enjoy stories of animals who behave like human beings. Later, both prefer stories in which the animals are realistic. But when, around age 8, girls begin to read fairy stories and folk tales avidly, boys are beguiled with science and adventure. When boys seek competitive sports, girls turn to sedentary games.

ARE THERE SOCIO-ECONOMIC DIFFERENCES IN INTEREST ?

In general, the better off the family is, the broader the child's interest. More money means more opportunity for exposure to ideas and activities. However, a poor family with a high regard for education may sacrifice to give learning opportunities to its children. A rich family may be so busy with social and business activities on the adult level that the children are neglected.

In middle class houses where both the parents are at work, children have to do the buying, the cooking, and other household chores when they are old enough to do these things with moderate success. The knowledge which such children draw upon in developing their interests is far different from that of children who play all day in the yard or street. For instance while children who do the buying for their poorer parents may be so successful in computation as to be greatly interested in arithmetic.

Again, however, studies have to be conducted that can throw more light on the question.

WHAT INTERESTS ARE CHARACTERISTICS OF THE BRIGHT STUDENT, OF THE ACADEMICALLY RETARDED STUDENT ?

Studies of bright students show that they tend to be abler in all respects, with more energy, health, and endurance than duller students. Because of their energy and their greater awareness of the world about them.

they tend to have more interests and usually at least one very deep interest—experiencing all they can about a certain sport, for example.

It is true that some students are bright in one subject and dull in others. It is not entirely clear whether this is always necessarily the case or whether their exposure to knowledge and skills has given them mastery in a single direction. It is also true that some students who are bright according to intelligence tests are not successful academically. There can be many reasons for this phenomenon—not the least of these, a personality defect.

Psychologists distinguish between creativity and intelligence. A child may be a poor student in other respects; but with natural aptitude (a good ear, for instance) and encouragement to be creative, he may develop into a composer of music. A brighter child with equal aptitude may not develop creativity in music or in anything else, because of the lack of such encouragement and opportunities.

HOW DO YOU BROADEN AND DEEPEN INTERESTS?

A teacher cannot be sure he is broadening and deepening interests until he knows what the child's interests are. We need to develop instruments and procedures for assessing the child's present interests, suitable for administration at the different levels. The young child, for example, cannot write his replies; his attention span is short.

The teacher has two possibilities for broadening the interests of the child: one, by bringing into the school the objects and activities and ideas which will make the child aware of many areas of interest; the other, by taking the child out to meet them—in the village, in the hills, on the plains, by the river. The child's world actually suffers when he enters a classroom

of four blank walls and a single textbook. It suffers even more when he is permitted to talk only to the teacher, for the richness of many points of view on a topic is lost in the duet of dictation and response. Our schools need to explore the possibilities for broadening children's interests in the classroom, in the school as a whole, and out of doors.

Major interests are deepened first by being identified; second, by being given time and place in the school programme. Does the child have a chance to talk about his hobby? Do other children have a chance to ask questions, make suggestions? May the child do related experiments in class time? Are books or models or illustrations made available to him? Are children given opportunities to explore their surroundings?

Providing opportunities for the development of interest is only one part of the job. Once the teacher knows the current interest of each child, he has to see that the child experiences success in the fields of his interest. This means that the teacher must know the child's capacity for achievement, the amount and kind of learning which will challenge him to pursue his interests further.

If we are able to provide the conditions for efficient learning, then the development of interests is possible. In fact the two are interdependent. Children's interests, highly individual, require knowledge of the individual child and knowledge of the individual means better teaching. It would be highly useful if schools would undertake investigations of the interests of children.

*DEVELOPING CHILDREN'S
LITERATURE:
SOME PROBLEMS*

AN IMPORTANT area that demands attention in any discussion on problems and processes of reading is that of developing suitable materials for extensive reading. Here it is essential to distinguish what should be the relative roles to be played by the basic text and by other enrichment material designed chiefly for leisure-time

reading. While the class text should be so developed as to help in the acquisition of the right skills, habits and attitudes to reading, it is the other material that will further enhance such reading and develop sustained interest and liking for books. 'Children's Literature' in this context, therefore, refers to all the literature other than texts meant for pupils at all levels of school. Again, the traditional notion of fiction as literature and non-fiction as factual prose read for information is hardly tenable. For, the story can foster in a child both critical thinking and intellectual growth even as a page of factual narrative about a scientific phenomenon can arouse his creative and imaginative faculties. When written well both categories are 'literature'.

HOW TO INCULCATE THE READING HABIT AMONG CHILDREN

Present-day children in most parts of our country do not read as much as they should. The reasons are not far to seek. On the one hand, school curricula and methods of teaching are, unfortunately, by and large the kind that do not permit extensive excursions into general reading and, on the other, even when teachers wish to encourage pupils to engage in profitable reading they are faced with the almost insurmountable problem of insufficient books of the right kind being available. Our first task is to build up a variety of such literature in all the regional languages. If from their very young years children are afforded chances of seeing attractive and colourful books around them, if they are read out to by adults, if they get opportunities to tell and hear stories and if they are brought up in an atmosphere where books are read aloud, then the nation's youth will grow to be assets in a democracy. It is true that parents have limited power to buy books for children and the majority are not even aware of the

need for books. In Asian countries, therefore, the problem of mass production of good books at economic rates looms large and must be tackled at national levels.

CHILDREN'S PREFERENCES IN READING

In developing a rich fare of children's literature we need to know more about what are the types of books children like to read most and we need to discover first-rate authors to write them. Our present knowledge about Indian children in this regard is depressingly poor. We need to conduct a few good surveys of the reading interests of pupils in Hindi and the regional languages, so that we can glean information about the type of literature best suited according to age, sex, intelligence and socio-economic factors. A Survey of Children's Literature in Tamil, Telugu, Kannada and Malayalam conducted by the Southern Languages Book Trust under an assignment from the UNESCO might be mentioned here as a notable contribution in this direction. This is a fairly comprehensive survey and gives a picture of the present position with regard to children's literature in the four South Indian Languages and covers all these aspects of the problem: preparation, production and distribution and includes teachers and librarians, authors and publishers and the children themselves. It has yielded useful information about children's preferences in reading with regard to the class of books they like to read, types of presentation, form of illustration and their reasons for such preferences. Similarly from the angle of the author and the publisher there is some light thrown on the production side of children's literature in these languages.

This is one type of survey that could be useful if extended to other Indian languages. On a smaller scale but equally important would be the contribution classroom teachers can make. We require to pool

together teachers' judgements on what books interest pupils in the different grades and even parents can help by enlightening research workers on what children like to do when outside school. These enquiries would give us some basis for developing the kinds of books most needed by our children.

CATEGORIES OF CHILDREN'S BOOKS

An examination of the types of books available for children in world literature shows in the main, the following categories:

- picture books and 'beginning to read' books for the early reader
- fairy stories
- animal stories
- folk tales: poems and songs
- myths and legends; stories from the classics
- travel and adventure stories
- tales of heroes of history
- stories of children's achievements
- biography
- books on themes related to social studies
- books on themes related to science.

With more knowledge about children's interests at different age levels and on the basis of linguistic studies giving insight into likely language levels for the different grades, it would be possible to build up a body of children's literature on systematic and graded lines.

INFORMATION AND REFERENCE BOOKS

Among areas that we need to give priority to in developing children's literature in Indian languages particular mention might be made of the urgency for building up information and reference books of quality. Children in one part of the country should be encouraged to read about the lives and customs, the festi-

vals and folk-lore of the other parts if a truly integrated national feeling is to be fostered among them. The art and architecture of the country is an area that lends itself to sensitive interpretation for the young. Simple, well-illustrated encyclopaedias will be of great help. Small booklets on various topics commonly asked about by children as they observe their environment, science books geared to different levels of reading ability, interesting magazines for children—these are some of the requirements in the field today.

AUTHORS OF CHILDREN'S BOOKS

A second problem relates to discovering authors of quality. Writing for children is an art and demands on the part of the writer deep insight into the minds and hearts of children, sympathy and understanding of their ways, sincerity and devotion to truth together with capacity for a uniqueness of expression, appropriate choice of words—with respect to their meaning, sound and rhythm, appropriate selection of tone or mood and a vividness in writing. The possibility of persuading eminent writers of adult literature to attempt writing for the young might be explored. More people would, perhaps, venture into this field if they found writing for children as remunerative as writing for adults. In this respect greater collaboration between writers, illustrators, publishers and educationists is called for in order to ensure the best books for the young. The establishment of study-groups at training institutions and by other agencies for providing discussion forums and training facilities for writers, editors, translators and illustrators of children's books would be a useful first step in this direction. Perhaps for the very young children in primary grades the best writers will emerge from the teachers themselves and every encouragement

should be given to them. A writing talent search conducted nation-wide would be highly valuable.

BOOK-PRODUCTION AT LOW COST

Ensuring the preparation of good books is one side of the problem. The other and equally important one is that of ensuring attractive productions at reasonable prices. Book-production, specially so of children's books, demands a joint effort on the part of several people: the author, the editor, the book-designer, the illustrator, the printer and the publisher. It is in the measure in which these are technically qualified for their respective jobs that high-quality production will ensure. Of these the most important is the role of the book-designer. This role today is being taken up by the publisher himself who with the artist takes decisions about the format and shape of the book. But with modern advances in the techniques of book-production the task requires technical skill of a high order. The book-designer has to be fully conversant with the typographical aspects of the production as well as with illustration, format, and printing problems. The appearance of the book needs to be such as fits the tone and spirit of the contents. Decisions regarding size of print and length of line appropriate to development of theme are important and basic. Illustrations should be such as do not interfere with clarity of print. That blend of type, illustration and text is something that adds to the tone of the book. Ordinarily young children like bright, primary colours and large, bold figures clearly set out from background, whereas children of 8 or 9 begin to ask for more subtlety in colour and design. Many styles are permissible provided the spirit is conveyed. There must be a strong suggestion of what is being *felt*, what is happening. Dull, lifeless drawings have no place even though they be exact to

the minutest detail.

The recommendations made at the UNESCO Seminar on Literature for Children and Juveniles held at Teheran¹ with regard to problems pertaining to the binding of children's books are worthy of note: 'There is dire need for considerable improvement in the binding of children's books. The binding should be attractive in appearance and appealing to the eyes; durable to stand against wear and tear; such as it avoids the use of wire-stitching; such as it allows the book to open completely flat.'

Stressing the need for producing books cheap, the Conference also recommends joint production by different countries as a means of achieving a high standard of production of children's books at the most economic prices. The coloured illustrations could be printed at one centre while the text is printed and the book bound in the respective countries in accordance with their requirements.

INSTITUTIONAL BUYING TO REDUCE PRODUCTION COSTS

Institutional buying is another answer to the problem of meeting the costs of producing high-quality books. Most of the children's books in many countries of the world are purchased by schools and public libraries. It is here that the government can step in and require institutions to maintain good libraries for their pupils, thus ensuring mass production of books, which, in turn, brings down the cost. Better advertisement techniques and more effort on the part of publishers to bring a good book to the notice of the teacher and the administrator can develop the book-trade and make the nation book-conscious.

1. The Report of the UNESCO Seminar on Literature for Children and Juveniles held at Teheran in April, 1964 has valuable suggestions with regard to several aspects of the problem of developing children's books in Asiatic Countries.

DEVELOPING READING INTERESTS

Bringing the book to the child is important. Bringing good books to more and more children is even more important. But, in the ultimate analysis, developing good reading habits and interests is very much the business of the teacher and the parent. It is of paramount importance that our young be guided to become fluent, thoughtful and evaluative readers of a wide range of literature. This cannot happen if in the class we are satisfied with getting pupils to decipher the letters in the language and plod through the book slowly. This is possible only if reading can become a purposeful and pleasurable activity. To that end must all the teaching of reading be geared.

AWARENESS OF EXCELLENCE

ONCE A school principal said to a teacher in his school, 'You teach them how to read, but look at what they read'. Opening a drawer in his desk he pulled out some magazines of poor reputation, and some comic books. He was making a good point. Literacy is not enough.

Literacy is not enough because one is influenced by the company he keeps. If he associates with poor speakers and poor authors, he will have little opportunity to develop higher goals in his own speech and writing. Nor will he experience the delight of hearing and reading the well-worded phrase. In addition to literacy, the teacher must develop in the young reader an awareness of excellence.

TASTE IN LITERATURE

The common term for this awareness of excellence is *taste*; however, the word *taste* is avoided here because many people use it as a synonym for interest. It is not truly the same as interest. Interest is a motivator. It creates a desire to do something. If you are interested in sports, you have a desire to associate with them: to play yourself; to read about them; to see games played by amateurs and professionals. After you have seen, read, and played yourself, you begin to notice that some players are better than others; this one catches the ball with no waste of motion; this one seldom fails to hit the target, etc. You begin to be conscious of skill, and to value it, to appreciate it. You, yourself, in playing the game try to improve your techniques, because now you know what is good and bad, what is better or worse. Ordinarily it takes very little to develop interest, but much experience to develop taste. And you know, some people never do develop taste. They like any old game, no matter how badly it is played. It does not pain them to see an opportunity lost, a misdirected shot. Pain and pleasure are matters of awareness. They have not developed an awareness of excellence in the game.

Taste is a product of culture. A foreigner coming to a strange country and seeing for the first time a different form of art may choose very badly the gifts to

send home to his friends and family. He has no way of judging quality because he has never seen such a thing before. He may think it looks crude, but it may not really be; he may think it looks fine, but it may be very poor. He can only learn by seeing many items of this form of art, asking many questions and listening very carefully. Then he will gradually develop standards by which to judge the excellence of this new form. What about those first gifts sent home? Fortunately for him, his friends and family probably are no more experienced in this art than he was. 'Joe sent us this from India,' they will say. 'Wasn't that sweet of him?'

HOW TO CULTIVATE TASTE IN LITERATURE

A child is born with uncultivated taste. He is interested in action. (No doubt his ancestors were, too, or they would not have survived to have descendants.) He likes to see things happen and to find out how they operate. When members of his family and, later, his teachers, tell him stories or read to him, he is interested in the plot, in what happens. He likes to hear and read stories about a person of his own age doing things he likes to do or would like to do if he could. Psychologists say he 'identifies himself with' a character and lives through the story as though it were his own. He may grow up to say, 'That was a good story,' when, actually, it may have been a poorly written story with a satisfying plot. Even the plot may be poor, but it may satisfy him because he has not developed standards for judging the excellence of the plot.

It is often said that a child will develop taste in literature if he reads a great deal. The amount one reads, however, is not a sufficient condition. Variety of excellence must be in that amount, and in some way the reader's attention must be drawn to the quality

of writing. Many people who 'love literature' and speak with pride about their reading of Shakespeare would be shocked to learn that Shakespeare did not always produce excellence. He had his bad days, like other human beings. Such people confuse the label (Shakespeare) with the qualities which made it famous. The true judge of excellence would be one who could read several unlabelled examples of iambic pentameter and say, 'This one is best because——'. And he would feel genuine enjoyment in reading it.

TYPES OF EXCELLENCE IN LITERATURE

There are several types of excellence in a piece of literature. If the piece is a story or a drama, the excellence of the plot is one feature to notice. What makes a plot excellent? Clues to excellence are to be found in critical remarks about stories. A reader may say, 'It took me a long time to get into the story.' Perhaps in this case the author spent much time in establishing the setting and characters without giving the reader the satisfaction of knowing what the problem was. Another may say, 'I got all confused about the characters.' May be there were too many, not clearly distinguished. Perhaps one character had several names and was called different ones at different times. Another person may say, 'There wasn't much to it.' Perhaps this means little action, little point to the story; or perhaps the author was more concerned with the feelings and attitudes of the characters than he was with events.

It is said that there are very few plots in the world: something is lost and must be found, something is desired and must be gained, something is feared and must be tested, someone feels helpless and must discover strength, something is in conflict and must find harmony, something is puzzling and must be put in order. You may be able to add a few to this collection.

Excellence of plot does not usually mean choice of plot but the manner in which the author handles it, presents it. Shakespeare borrowed his plots. What he did with them was excellent.

The author gives the plot a setting. He presents characters. He selects situations, people and events which will serve his purpose. He suggests and makes the reader wonder. His artfulness in characterization, his wisdom in selection, his organization of material, the timeliness and manner of his suggestions, all are matters of quality.¹

HOW TO DEVELOP THE AWARENESS OF EXCELLENCE

How can the awareness of excellence in literature be developed in children and youth? There are varied opinions but little research to prove them. However, the opinions are worth considering and just may, in combination, provide a good programme until research can give us firm answers. Here are some of the opinions held by teachers.

If children have parents who have good taste in literature, the children will develop taste, too.

If students have teachers who have good taste in literature, the children will develop taste, too.

If students are exposed to good literature which is easy enough for them to read or listen to, they will develop sensibility to quality of thought and writing.

If students are presented with contrasts of good and poor literature which is easy enough for them to understand, they will become aware of the qualities that make literature good.

1. The following are outlined as essential attributes of effective writing: vividness, suggestion, appropriate tone or mood, uniqueness of expression; appropriate structure (clear, varied, forceful, suitable), appropriate choice of words (meaning, sound, rhythm), sincerity, truth to life, economy, depth of meaning. For a fuller discussion see:

Tinker, M. & McCullough, C. M. *Teaching Elementary Reading*. Appleton-Century Crofts, New York 1962. pp.31-34

If students are given creative writing experiences comparable with those of the authors whose works they read, they will develop more appreciation for the merits of the works they read.

If musical patterns are used in comparison with various tempos, sounds and rhythms of effective writing, students will become aware of the effect of rhythm, sound and tempo in verbal material. (Same for the dance.)

If the teacher himself is appreciative of the qualities in good literature, the contagion will affect his students.

Rapid reading of good literature will ordinarily fail to yield awareness of quality.

If a student tries to express how a piece of literature makes him feel and tries to determine why, he grows in awareness of its values.

If a student hears a piece of literature effectively read and has been asked to listen for a certain value in it, he becomes more aware of that value.

If a student reads a piece of literature only silently, many of the qualities which make the literature outstanding may escape him.

If a student sees a play or film and then reads the story to notice one quality, he can sense what the author has done that the play has not, and vice versa.

If parents and teachers read good literature aloud to children, children's ears will become tuned to good qualities in literature.

HOW TO MEASURE THE AWARENESS OF EXCELLENCE

How can a teacher find out whether his efforts to sensitize students to the qualities of good literature have been successful? How can a research worker find out the relative merits of teaching programmes? There are informal ways (the student's free choice of reading material, the answers he gives to questions about the

quality of what he has read.) In addition to these, which may or may not be proof, there are surer ways. Two tests of literary taste, now out of print, were produced in the United States some years ago and designed along similar lines. In 1921 the Abbott-Trabue tests entitled *Exercises in Judging Poetry* were published by the Bureau of Publications, Teachers College, Columbia University. In 1935 Herbert Carroll published his *Prose Appreciation Test* in junior high school, senior high school, and college forms, at the Educational Test Bureau in Minneapolis, Minnesota.

The organization of these tests may serve as a useful model for research workers in India. The poetry test consisted of thirteen sets of poems on different topics. Each set contained four versions of the topic, and the reader was to rate the poems in order of their excellence. The prose test contained fourteen sets of prose selections, each set consisting of four passages on a single topic. The reader was to rate the prose selections in the order of their excellence. Critics and teachers of English were asked to rate the selections when the tests were first constructed, and their agreement established the desirability of certain selections and the ratings in the answer key.

In 1952 Dr. Delwyn Schubert¹ tested a large group of college students in Southern California to see whether those who had well-developed reading skill also could distinguish the four levels of prose in the Carroll test. He found that all the students performed relatively poorly on the appreciation test, and he concluded that reading skill was no assurance of reading taste, and that the schools had been relatively unsuccessful in developing appreciation of literature.

Designers of such tests in India might consider

1. Schubert, D. G. 'The Relationship between Reading Ability and Literary Appreciation', *California Journal of Educational Research*, Vol. 4, p. 201-202, November 1953.

another approach. A high score on the Carroll or Abbott-Trabue test showed only that the student was able to distinguish the passages properly. It did not show on what basis or bases he made the selection. Perhaps a test could be constructed in India in which some sections had equally good passages except for one quality. Several such items would show the student's awareness of that quality. This would be difficult to do but should not be impossible, and it would yield a diagnosis valuable to the teacher.

Some people in India struggle for mere survival. Exhausted and without light at the end of a day, they do not read. But what of those in India who have enjoyed an education, good health, and energy to spare? How many of them reflect the four thousand years of Indian culture in their awareness of excellence in Indian literature? What are the chances that their children will do this? Who will make the most of a great past and a demanding present?

EVALUATING READING ABILITY

ONE OF the basic problems of the subject-teacher is to know how far his pupils are progressing in that particular subject, what their needs and difficulties are and how well they can be helped to grow in the right direction. For this a good evaluation programme is imperative so that the process of teaching and learning may be made more effective.

In the field of reading too, the teacher needs to have a knowledge of each pupil's development in the

reading skills and abilities so as to make the reading growth of children optimal and the reading disability minimal.

WHAT TO EVALUATE?

When the teacher starts analyzing reading ability, he finds that he has to take into account a number of components like word-recognition and word-analysis skills, paragraph comprehension, visual perception of letters and words, auditory discrimination of sounds, ability to grasp main ideas and details, ability to interpret, ability to draw inferences and evaluate, ability to read with understanding in various content fields, as well as such skills as speed of comprehension, oral reading, using reference material and locating information.

But the question is whether all these abilities can be distinguished from one another and if so which abilities out of the above list the teacher can appraise. This question may be answered by factor analysis. But a common-sense approach indicates that most of the above abilities overlap each other and a teacher need not appraise each and every ability separately. The best that he can do is to analyze reading ability in terms of fundamental areas like the following: vocabulary development, word-recognition, comprehension, speed of comprehension, oral reading, reading in the content fields, as well as habits, interests, attitudes. He should then try to evaluate the child's growth in each of these areas.

HOW TO EVALUATE?

As has been said above, reading is a composite of different skills and abilities and as such there can be no one tool or one method to evaluate reading ability as a whole. There are various devices and methods of evaluation. Some of the devices and methods are as follows:

- a) Standardized tests
- b) Teacher-made tests
- c) Teacher observation
- d) Record cards
- e) Work-book tests
- f) Interest inventory
- g) Questionnaire.

STANDARDIZED TESTS

Today standardized tests are commonly used in many of the countries for evaluating different kinds of abilities of children. A standardized test is that test which is reliable, valid, objective, comprehensive, discriminating and usable, and besides all these, which has the norms ready to compare the performance of two groups of children or of different children in the same group. Thus standardized tests make it easy to tell the levels of the various abilities of a child, or of a class, in relation to the norms of a large number of children that took the test while the test was being standardized.

Suppose a reading comprehension test has 50 items and has been administered to a large sample of 5000 children of class V in the different Hindi-speaking states of India. Let us presume that the average score of these children in that particular test is 24. This 24 is called the norm of that test. If any child of class V in the Hindi-speaking area obtains a score less than 24 in that particular test, we shall say that he is below normal in that particular kind of reading comprehension ability. A child obtaining 24 in that test would be called average and another child obtaining more than 24 would be called above average. This illustrates how a standardized test is used for comparing the ability of individuals (or sometimes of groups) in a particular area.

Standardized tests of reading are mainly of two types:

- (a) Survey tests
- (b) Diagnostic tests

(a) Survey Tests

The main purpose of a survey test is to ascertain pupils' level of achievement of reading in a particular class. Most survey tests have two parts, one designed to measure vocabulary and the other to test comprehension.

Below are some illustrations of multiple-choice items for testing vocabulary and comprehension:

Vocabulary

आदेश : नीचे कुछ प्रश्न और उनके सामने उनके चार-चार उत्तर दिए गए हैं जिनमें एक या अधिक उत्तर सही हैं। प्रत्येक प्रश्न के सामने सही उत्तरों के नीचे रेखा खींचो।

१—हमें कौन सा जानवर दूध देता है?

गाय	बंदर	भालू	घोड़ा
-----	------	------	-------

२—इनमें फल कौन सा है?

केला	आलू	गाभी	मटर
------	-----	------	-----

३—हवा को और क्या कहते हैं?

पानी	पवन	जल	वायु
------	-----	----	------

Comprehension

आदेश : नीचे एक कहानी दी गई है। इस कहानी को पढ़ो। कहानी पढ़ने के बाद उसके नीचे लिखे वाक्यों को पढ़ो। जो वाक्य उस कहानी में पढ़ी गई बात बतलाता है, उसके चारों ओर घेरा लगा दो। जो वाक्य उस कहानी में पढ़ी गई बात नहीं बतलाता है, उसके चारों ओर घेरा मत लगाओ।

कहानी : पूरन मेला देखने गया। मां ने उसे पैसे दिए। पूरन उमा के लिए गुड़िया लाया। उमा गुड़िया लेकर खुश हुई। दोनों बाग में जाकर फूल ले आए। उमा ने गुड़िया को माला पहना दी। मां ने बच्चों को प्यार किया।

- वाक्य : अ) उमा मेले से गुड़िया लाई।
 ब) पूरन और उमा बाग में गये।
 स) मां ने गुड़िया की माला बनाई।
 द) उमा और पूरन को मां ने प्यार किया।
 ध) उमा और पूरन गुड़िया लेकर खुश हुए।

(b) Diagnostic Test

A diagnostic test is meant to ascertain pupil's difficulties or weaknesses in different reading skills and abilities. These tests are helpful to teachers to evolve remedial programmes of reading that can remove the difficulties and weaknesses.

A variety of diagnostic tests is used. Some tests attempt to provide a detailed analysis of both comprehension and word-recognition skills. Some others provide an analysis of word-attack skills and point to aspects of phonic and structural analysis that need strengthening. A diagnostic reading aptitude test is another variety which intends to measure visual memory, auditory memory and discrimination, motor speed, and vocabulary. Diagnostic tests are also used for oral reading.

Below are given some illustrations of diagnostic tests:

Oral Vocabulary

आदेश : नीचे दाईं ओर कुछ अधूरे कथन दिए गए हैं। प्रत्येक कथन के सामने दाईं ओर चार शब्द दिए गए हैं। प्रत्येक कथन के लिए उसके सामने वाले शब्दों में एक शब्द ऐसा है जिससे वह कथन पूरा हो जाता है। प्रत्येक कथन के अन्त में वह सही शब्द लगातार पढ़ो।

(१) अन्त का अर्थ है

आखिर	पहले	बीच	मध्य
------	------	-----	------

(२) बलवान का अर्थ है

डरपांक	ताकतवर	कमजोर	क्रोध
--------	--------	-------	-------

Oral Reading

आदेश : नीचे दी गई कहानी को पढ़ो।

हाल पर झूला है।

रानी झूला झूल रही है।

झूला टूट गया।

रानी गिर गई।

राम ने रानी को उठा लिया।

While the child reads teacher may record the following kinds of errors:

- (1) Hesitation (Example: Takes 20 seconds to read (झूला)
- (2) Mispronunciation (Example: for झूला reads झूल)
- (3) Omissions (Example: झूला गया)
- (4) Substitutions (Example: for हाल reads पड़)
- (5) Insertion (Example: हाल पर एक झूला है)
- (6) Repetition (Example: झूला झूला टूट गया)

In the brackets examples of different kinds of errors have been given. After diagnosis the teacher evolves a remedial programme to remove the difficulties of individual children.

The construction of a good standardized test in reading is a laborious job and requires technical knowledge in the field of testing. These are generally prepared by specialists on a commercial scale.

In our country there is a great dearth of standardized tests in the field of reading. It is partly because

of cost involved in the construction of these tests and partly because of the lack of testing services and specialists.

TEACHER-MADE TESTS

There is not much difference in the types of questions that are included in standardized tests and teacher-made tests. In both the tests the questions are of the objective type or short-answer type. But the difference lies in the fact that teacher-made tests are geared to the specific needs and goals of a particular class. Standardized tests, however, are concerned with measuring reading achievement of students in the whole district or state or country.

Besides, a teacher-made test gives more opportunity to the teacher to involve himself in all the steps of evaluation procedure. The work of constructing an objective test yields real benefits to him in professional growth. It is also much cheaper than standardized tests.

For our country the use of teacher-made tests seems to be one of the most effective and economical devices of evaluation. Each teacher should make some effort to construct objective tests according to the needs of his class and use them from time to time.

TEACHER OBSERVATION

One of the most effective tools in the hands of the teacher is his own observation of pupils' progress in various aspects of reading.

A resourceful teacher appraises objectively the reading interest and attitudes of his pupils by observing the kind of books they select for their voluntary reading and by watching them at work in the school library.

He watches the vocabulary growth of his pupils

and sees how far they know the concepts of the different words at their command.

He notices the oral expression of his pupils during reading. He studies the emotional behaviour of pupils during oral reading. He judges how far the pupils comprehend the material read by them.

He also notices how far the pupils can rely on their reading for needed information or for any kind of activity that they want to undertake.

Observation as a device for evaluation seems to be handy and can be made as objective as it can possibly be. But for using this technique the teacher should overcome any prejudices which he may have toward any pupil, otherwise this may do more harm than good to his pupils.

RECORD CARDS

It is quite difficult for a teacher to keep in mind the progress of each pupil in his class for a long period. For this reason he needs to maintain a record of each pupil's progress in a particular area. This may be done daily or weekly.

Generally there are two kinds of record cards: anecdotal records and cumulative records.

Anecdotal records are brief reports of incidents or episodes in a pupil's life that are judged to be significant in indicating his adjustment and development. They include both an objective description of behaviour and an interpretation of such behaviour. For example, a noting may read: 'Kishore has started making an effort to collect picture story books. He has started taking interest in reading picture stories.'

In cumulative record cards various kinds of data and information gathered regarding the pupil are entered in a systematic manner. This includes information regarding a pupil's socio-economic background,

interests and hobbies, aptitudes, achievement in various school subjects, physical health, personality qualities, etc.

All this information is very helpful to teachers in giving individual guidance to pupils for developing their reading skills and abilities. A careful maintenance of these record cards goes a long way in evaluating the reading ability of the pupil and in involving effective reading programmes for them.

WORK-BOOK TESTS

The Pupils' Work-book is another evaluative tool that is helpful both to teachers and pupils. The work-book contains various types of exercises that are related to reading skills and abilities. The errors and mistakes of pupils indicate their difficulties and weaknesses. A good teacher analyzes these mistakes carefully and evolves certain methods to guide pupils so that their progress may not be hampered.

INTEREST INVENTORY

Pupil's Interests play an important part in his reading development. Different kinds of reading inventories have been prepared to discover the child's interest and tastes. An example of an interest inventory is given below.

आदेश: नीचे दो प्रकार की क्रियाओं के जोड़े दिए गये हैं। प्रत्येक जोड़े में तुम्हें जो क्रिया अधिक प्रिय हो, उसके सामने दिये गये कोष्ठक में X का चिन्ह लगाओ।

(१)	खेलना	()
(२)	पढ़ना	()

(१)	कहानी पढ़ना	()
(२)	अखबार पढ़ना	()

(१)	रेडियो सुनना ()
(२)	कहानी सुनना ()

(१)	पढ़ना ()
(२)	सिनेमा देखना ()

THE QUESTIONNAIRE

The questionnaire can be used for various purposes. It is helpful in discovering a pupil's reading interests and tastes. It may be used to discover his habit of reading. It may be used to know his problems regarding reading.

A few examples of the items of a questionnaire have been given below:

- १) निम्नलिखित चीजों में आपको जो सबसे अधिक प्रिय है, उसके सामने कोष्ठक में X का चिन्ह लगाओ ।

अ) उपन्यास पढ़ना	()
ब) अखबार पढ़ना	()
स) विज्ञान की बातें पढ़ना	()
द) सामाजिक कहानी पढ़ना	()
ध) हास्यप्रद कहानी अथवा नाटक पढ़ना	()
- २) तुमने अपने जीवन में जो पुस्तकें पढ़ी हैं, उनमें से उन पांच के नाम लिखो जो तुम्हें सबसे अधिक प्रिय लगी हों। संक्षेप में यह भी लिखो कि वे पुस्तकें तुम्हें क्यों प्रिय हैं।
- ३) अपनी दिनचर्या लिखो और यह स्पष्ट करो कि तुम प्रतिदिन कितने घण्टे पढ़ते हो।

It may be said, therefore, that the reading ability of the pupil cannot be evaluated by using one tool or a single device. The teacher has to use a variety of tools and devices to get a correct estimate of the child's progress in reading.

THE PREPARATION OF TEACHERS

[Below is an abstract of a suggestive course for the Methods of Teaching the Mother-tongue proposed for primary training institutions developed at the Summer Course in Reading. With suitable modifications and a deepening of the content, a similar course could be designed for secondary training colleges.]

A CRITICAL examination of the present courses in the Methods of Teaching the Mother-tongue (special reference to Hindi here) as prevailing both in the primary and secondary training institutions reveals that (a) the emphasis is more on the theory of language teaching and less on practical issues (b) the teaching

of prose, poetry, composition and grammar, are often unrelated to each other and (c) there is very little provision for helping trainees get an insight into the development of language skills as a unified whole.

In designing any new course certain basic guiding principles will need to be clarified at the outset. Among these mention might be made of the following:

The course should help trainees understand:

- (a) that language growth has much to do with the development of the child's personality;
- (b) that the language teaching programme of a school must be planned in a graded and sequential manner, integrating the four skills of listening, speaking, reading and writing;
- (c) that reading is central, particularly in the early years when the foundations of the skills are to be laid;
- (d) that the language programme of a school must be viewed as being closely related to the learning of the other subjects as it occupies a pivotal place in the curriculum; and
- (e) that the language programme of a school must as far as possible meet the needs of individual pupils.

The outline suggested herein has been worked out to fit into the frame-work of the present practices as prevailing in training institutions. It assumes, broadly speaking, the division of time during *the one year* course into *three* areas of work for the trainee—viz.

- (A) lectures and discussions on language teaching problems
- (B) sessional practical assignments connected with the above

and (C) practice teaching

A. The details of the *Units* to be covered through lectures and discussions are as under and will require about 25 hours through the year—

- Unit I *The Place of Language in Life*
- the major uses of language in man's development: personal, social
 - Language in the School Curriculum*
 - its importance and relation with other subjects
- Unit II *The Child and Language Development*
- factors affecting the language development of the child
 - the process of language development in the child
 - individual differences
 - the exceptional child
- Unit III *Learning the Skills of the Language*
- listening, speaking, reading and writing
 - their interrelatedness
 - their meaning, dimensions and significance
- Unit IV *The Concept of Readiness in Language Learning*
- the need for a preparatory programme
 - factors influencing readiness
 - developing readiness
 - ways of building, listening and speaking skills
 - appraisal of readiness
- Unit V *Learning the Mechanics of Reading*
- factors involved in the reading process and the importance of vocabulary
 - word-perception skills and their development
 - oral and silent reading
 - developing reading comprehension

Unit VI Developing Word-Study Skills

- auditory discrimination
- visual discrimination
- word-analysis skills
 - (a) phonetic analysis
 - (b) structural analysis

Unit VII Developing Comprehension and Interpretation

- the skills of comprehension
- grasping the main idea
- skimming to discover a specific fact or facts
- understanding and recalling a sequence of events or ideas
- following directions
- organizing information
- the development of critical reading
- inferring details
- predicting outcomes
- making comparisons
- drawing conclusions
- seeing relationships
- reading for different purposes
- the place of reading in the content fields

Unit VIII Developing Appreciation and Interest

- factors involved in developing appreciation and interest
- techniques of creating taste
- reading materials required

Unit IX Learning the Art of Written Expression

- the mechanics of writing: problems; methods of teaching

- developing written expression—the place of composition
- acquiring mature writing habits
- correction and helping the individual child
- developing creative writing and style

- Unit X *Evaluation of Language Ability*
- the concept of evaluation
 - ways of assessing pupil progress in language
 - the development of tests: oral; written

- Unit XI *The Teacher's Professional Growth*
- need for keeping abreast of recent professional studies
 - ways of preparing for the task
 - the importance of in-service programmes; teacher's associations, etc.

B. SUGGESTIONS FOR SESSIONAL PRACTICAL ASSIGNMENTS

- (1) Review and discussion of children's books read by the trainee
- (2) Analysis of current syllabi in the mother-tongue
- (3) Analysis of sample lessons from the language texts with a view to assessing their suitability
- (4) Preparation of illustrations for a given story or lesson
- (5) Preparation of tests for the different skills of language
- (6) Review of professional literature
- (7) Library work—getting acquainted with the system of classification and arrangement of books in a library

- (8) Developing a programme of remedial exercises for given skills
- (9) Planning a language project
- (10) Developing samples of pupil record cards.

It must be mentioned, however, that the above course is exploratory and suggestive. It attempts to tackle the problem of the preparation of teachers from a practical and useful angle. It shows how it is possible to develop insight in teachers in an integrated approach to language teaching—building the skills together. It is offered as a suggestion that might be further pursued by training institutions.

AREAS OF NEEDED RESEARCH FOR INDIA

ONE OF the terrible truths that we are constrained to face in our country is the presence of a huge percentage of illiteracy. About 76 per cent of men and women of our country are illiterate, in the sense that they cannot read and write.¹ This is dangerous for the health of our democracy, for it means that the vast

1. Publication Division, Ministry of Information and Broadcasting, Government of India. *India 1961*. p.559.

majority of our people are ignorant about the problems of the modern world. They are handicapped in making wise choices and wise decisions about many facts of modern life. Every effort must, therefore, be made to root out illiteracy from the country.

THE QUESTION OF WASTAGE

If we turn from adults to school-going children, we notice that we have to go a long way to provide free and compulsory education to our children in the age group 6-14 years. The figures showing the approximate percentage of enrolment at the different levels of school of the total population of the particular age group is as follows:-²

Age Group	Percentage
6-11	61
11-14	23
14-17	12

But apart from meeting the problem of getting children into school, there are several problems of reading that, once in school, our children are confronted with and which demand our attention. Obviously one of the big reasons for the large incidence of drop-outs in the primary grades is the poor teaching of reading.

READING AND THE CURRICULUM

In our schools reading has been given hardly any place in the school curriculum. State syllabi make a mention of reading as an activity but no systematic teaching ensues. Some teachers who try to teach reading do so in such a mechanical way that it calls for cramming on the part of the pupils. It may not be necessary to include reading as a separate subject in the

2. National Council of Educational Research and Training. *Review of Education in India (1947-61)*. 1961 pp. 790-99.

school curriculum if it finds a place in the language programme of the school. When reading is viewed as one of the skills of language learning and not an isolated set of skills and habits, a unified language programme becomes imperative. Whether reading is viewed as a separate subject or as one of the parts of a unified language programme, it is necessary to give it an appropriate place in the school curriculum. Educational administrators and curriculum framers must realize its usefulness and importance.

TEACHER TRAINING

At the same time, giving reading a place in the school curriculum alone will not raise the reading standards of our children. We need trained teachers who can teach reading systematically. Teachers should know the full meaning of reading; they should be acquainted with the various factors involved in reading and the techniques for developing reading skills; they should have a knowledge of the methods of teaching reading and of evaluating the performance of children in reading; they should possess knowledge about diagnosing and remedying the reading difficulties of pupils, and, last but not the least, they should know how to develop the reading tastes and interests of children. For all this we must turn to the teacher-training institutions in the country. Unless reading is given a place in the curriculum of the training schools and colleges the dearth of good teachers of reading cannot be met.

DEVELOPING EDUCATIONAL LITERATURE

When we consider a teacher-training programme or the development of in-service education, we face the problem of building up suitable literature for the teacher-trainers and the trainees. In the U.S.A. and the

U.K. there exists sufficient literature both at school and in the training institutions on different aspects of reading. Is there good material on the reading of Hindi or other regional languages in India which may be helpful for the teachers and teacher-trainers? One might say that we can use English books on reading. There cannot be any denying the fact that one can get a wealth of knowledge by reading the English books. But problems of reading pertaining to Hindi and the Indian languages are special and peculiar, and books must be developed in this country.

For example, because of the phonetic nature of Hindi the problem of pronouncing words according to their spelling is not so great as it is in English. Also, the methods of reading Hindi cannot be entirely the same as that of any other language. It is, therefore, necessary that we should read foreign literature on reading with some precaution and try to develop our own thinking on reading in the different regional languages.

PREPARATION OF READING MATERIALS

Children read through the medium of books or some other printed matter. Are the materials that our children use suited to their mental level, interest and taste? Do we care to include those necessary concepts and values in our books which must be developed among our children through books? Do we know what words and how many words should go into the books of children of different classes? Have we agreed upon some suitable methods of teaching reading which are based on empirical evidence and on the basis of which the books should be written? Do we know the interests of children of different grades as a basis for writing the plots of books? And what is more, is there enough material for our children to read? These are the problems we must solve if we want to

produce suitable literature for our children.

If we stop for a while and think about these problems we would find that a lot more is yet to be done to turn out suitable books for our children which can really develop their reading ability. This is a tremendous job and no single agency alone can solve this problem. Perhaps the lion's share of the responsibility for finding a solution to this problem goes to the teachers of the country.

METHODS OF TEACHING

For years now we have been teaching reading to our children but we are not yet certain of the methods of teaching reading. For example, for teaching reading in Hindi, which is phonetic, should we start from the teaching of the alphabets first or should we give children the whole word or even the whole sentence first? What techniques should be used for developing the skills of reading? Children encounter different types of difficulties in reading. Some have trouble with visual discrimination, some show deficiency in their vocabulary, some cannot comprehend the matter read by them, for some left-to-right eye-movement is a problem, some cannot evaluate and appreciate the matter read by them, some are slow readers, and so on. What techniques should be used for developing visual and auditory discrimination? How shall we give them left-to-right orientation in reading? How do we remedy those who commit mistakes of reversals? What methods should be used for developing vocabulary and comprehension? What techniques should be used to increase the rate of reading of slow readers? In what way can we make our children creative readers?

All these are problems of teaching reading in our country. Here again we look towards the teachers and educational thinkers for solutions.

THE NEED FOR RESEARCH

No educational programme can stand on a hypothetical pivot. For the introduction of any programme in the country it is always essential to conduct some research and base the programme on empirical evidence of the results obtained. How many facts do we know about reading in our country which are based on the empirical evidence of research studies? Some persons have attempted to make preliminary investigations in some of the aspects of reading but the results of these investigations may not be conclusive. Our country cannot afford to wait for launching some preliminary studies like the following if at all we want to run effective reading programmes and make our children creative readers.

AREAS OF STUDY

- 1— A survey of reading standards at school for the different grades and in the different languages
- 2— A study of the problems involved in teaching reading
- 3— An investigation to determine the percentage of school beginners who are not ready to start reading at the time of school entrance
- 4— A study of the drop-outs due to reading disabilities
- 5— The development of a programme aimed at the prevention of failure in first grade reading by means of adjusted instruction
- 6— A study of the causes of poor reading ability of the pupils in the different grades, and suggestions for improvement
- 7— A correlational study between reading ability and achievement in different school subjects
- 8— A study of the reading interests of children of

the different age groups, of different sexes and of different socio-economic background

- 9— A study of the various concepts of children of different ages
- 10— A critical analysis of the existing textbooks in Hindi and other regional languages for the primary grades, with special reference to reading
- 11— A correlational study between reading ability and visual and auditory perception
- 12— A study aimed at evolving suitable techniques for developing comprehension ability in pupils of different grades.

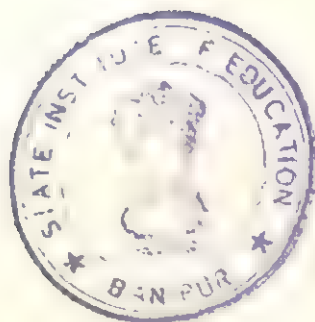
This is not an exhaustive list of researches in the field of reading, but a preliminary start can be made by selecting some of these areas. The results of these studies would be helpful in evolving suitable techniques of teaching, in developing suitable concepts among children by introducing them into books, in improving the reading ability of youngsters, in diagnosing and remedying the weaknesses of poor readers, and so on. We have to decide how these research studies can be conducted.

For conducting a research and for evaluating the progress of children in any branch of knowledge we need some tools. A researcher or a teacher of reading very frequently requires different kinds of tests in reading, like silent reading tests, oral reading tests, diagnostic tests, reading readiness tests, survey tests, etc. At present there are hardly any standardized tests of reading in India. We have to build up a pool of tests which may be accessible to research workers and the teachers of the country.

Now, turning from school children to literate adults in our country, let us try to find out the general standard of reading of the literate mass. This is indeed a difficult problem. We have to know about the read-

ing habits and interests of our people. We should conduct a survey to know what reading material exists in our country and how far it is accessible to those who want to read it. We need to find out how much time an average literate person devotes to the reading of newspapers, magazines, journals, books or any other reading material, and what ideas he meets with in his reading. We need to know the quality of the material that is being read by the different sections of the Indian population. All these are questions which are to be answered if we are to know about the general standards of reading of our literate adults. What are our answers to these questions?

Our country needs critical and creative thinkers. It is reading in its real sense that can make man a critical and creative thinker. It is high time that we started a movement for Reading in our country.



MEETING THE CHALLENGE

[Being the Valedictory Address delivered by
Shri Raja Roy Singh, Joint Director, National
Council of Educational Research and Training
on June 21, 1964]

I AM thankful to you for having attended the Course and helping to make it a success. From what I have seen during these two days I have got the impression that the Project Team has got a great deal from you. I hope that you have also got something from them. It is this give-and-take that is really the hallmark of successful work. I presume you have gained certain new ideas and certain old ideas must have been

confirmed while some of your prepossessions and biases have, I trust, been removed. Now what is the next step?

I would look forward to this becoming a closely knit group, an active nucleus round which a Reading Movement will gather force. Any such movement requires an active nucleus. For a nucleus to develop it is necessary that each individual member carries a certain responsibility. Each one of you can do something in your own area to further this Movement of Reading. The insights you have gained, you should be eager to pass on to your colleagues.

For instance, what you have discussed during the Course may relate primarily to the first two or three grades of school. It is important now that you should keep in close touch with the primary school, with the teachers and more so with children. I hope our training institutions will continue to have direct contact with our primary schools, for, unless you establish such a contact, what you have gained from these discussions cannot be furthered. But for this, much will depend upon the individual initiative that you will exercise.

This Course is but an introduction to reading. The subject of reading is so vast and complicated. It is bound up with the whole personality of the child. The process cannot really be mastered. Your concern must, therefore, be as to how you can keep abreast of recent trends in reading. I suggest that there are two ways of doing this:

First, your own experiences—the real and genuine experiences—can provide the basic material for your own professional growth.

Secondly, the Project staff should keep you informed of developments. A quarterly Newsletter of an unspectacular kind but containing not so much the ideas of persons but good abstracts and well-constructed resumes of the latest books and articles from journals should be sent to the members of the group. This is

one way in which the members of this group can keep themselves informed of the developments in this field. The other way is for the Project staff to let you have on loan good literature—books and journals—to be read and returned so that through such regular converse a militant vanguard can be built up for the Movement.

On the subject of Reading itself I dare say you have listened to much during these days. You have talked on Reading and you have written on reading. You don't expect me to add anything new. But the subject is so fascinating that I might be allowed to unburden myself of a few stray thoughts.

You will notice that the three R's have now fallen into great disfavour. Practically every book on education claims that education is more than the learning of the three R's. Every prominent speaker, every Commission's Report stresses that education is no longer the study of the three R's. That is a pity in a way, for Reading is one of the three R's. If this Course has introduced the idea that reading is very much wider and deeper, very much more than the mere picking out of what there is in print, it would have achieved something.

Reading is obviously connected with language. And language is not merely an instrument of thought but is tied up intimately with the growth of personality. A person without language or with limited language is a person with limited thought. Deprive the child of language and you deprive him of thought. As the human mind develops, thought increases and, of course, there are higher stages of the mind that don't require language for their expression. But in dealing with schools, at this level, we must recognize that language is not only an instrument of expression but an active agent of all activity. Then Reading becomes important and has a place at the core of the problem, being an indispensable means for human development.

Let me look at the problem from another angle.

Most of us as we meet our young people are distressed by two or three characteristics. First, a lack of proper study habits. It is unfortunate that they evince no curiosity, no spark and have not developed proper reading habits. Or rather we have failed to help the young make headway with developing the right study habits. Secondly, many of them do not really do any critical thinking. They are prepared to take statements on trust. How many of them accept statements which affect emotion because they have not learnt to reason carefully? These are matters for distress.

All this, I submit, can be traced back to the way we teach right from class I. This is not something to be attended to at the University stage or even at the secondary. Even in our teacher's training colleges we know of how our trainees are themselves not capable of reading with discretion. But this is to be built up from the primary grades. That is why class I is so important.

References were made earlier in your discussions to the terrific wastage that occurs in the primary classes. In classes I and II also the number of drop-outs is around 35% and the figure for classes I-V is as much as 45%. This is indeed terrible wastage. But the reason is, undoubtedly, to be related to something that happened in class I. Do not take very seriously the argument about socio-economic causes for the drop-outs. That does not explain the amount of wastage. For one thing if parents are so eager and there is so much parental interest in the beginning, what happens within eight or nine months to make them lose this interest? Surely this can be directly attributable to pedagogical grounds.

Two points are worthy of note with regard to class I.

(a) You can defeat the child completely by introducing him too early to the printed matter.

(b) You can defeat quite a few children if you delay them too long by introducing them to the printed matter too late.

In a class of about 40-50 children some will feel frustrated because of being held back too long and some because of being pushed too early since the environment of the book is a totally new environment for the child. What do we do?

Each child has to be treated as an individual. Methods must always be subordinated to the child. This had better be kept to the best judgement of the teacher. But the teacher's sympathy and understanding have to be deepened. There is these days a great deal of sentiment about educational science. We think that if we talk about children in sentimental terms we are lovers of children. But what is required is insightful treatment. Every member of this group can do his bit in this direction. Take a small group of primary teachers and give them this insight.

A word about libraries. Much has been said about the lack of reading material. Very few of our primary schools have any books at all. In a sample survey that was made it was found that 40% of the children in the primary school have no textbooks at all. And yet strange to say we hear loud protests about our education being textbook-ridden. Where is the textbook, I ask? Let every child have a textbook and let us see how that helps.

So the provision of reading materials is important. But is that all? Haven't we schools which have splendid libraries and are they used? Some complain that if there is a school there is no library. If there is a library, there is no librarian. But let me add that even in schools where there is a library and a librarian, the books are locked! I had occasion to visit recently a so-called model elementary school in an urban area, a school being supported by government. There the teacher-pupil ratio is 1:15 and they have a splendid library and a laboratory—but the school was dead. Not a single book was being used. Nearby was a tented school where I drop-

ped in on my way back. There were but two teachers in that primary school for about 100 children. Yet that place was buzzing with activity. They had collected books from parents, whatever they could spare, and a beautiful library was growing. Those two teachers had made all the difference. This is the kind of leadership we need.

One other aspect of our school life needs some attention: that of the place given to oral work. When you visit our schools you are struck by the complete lack of oral work in any of our classes. By oral work I do not mean the mere repetition or recitation of poetry. I mean expression work. How much time do we give our children to speak in the class? Visit a class with a watch and find out for yourself how many minutes children get to speak and how many the teacher. Oral work has to become a part of reading. For this, children must be given enough experiences to talk about in the class.

During the last two or three years I have had the opportunity of visiting a few foreign countries: I have observed what goes on in their schools—in Russia, Germany, England, U.S.A. and Japan; and connected as I have been with education in our country for over nine or ten years, I have visited a few thousand schools in our own country. What strikes one most obviously is the amount of opportunity that is given in a foreign classroom for children to respond in comparison with the lack of it in ours—and that is an unhappy thought.

So all this needs the attention of an active nucleus. If you can take one school and just one or two teachers in your own area and give them this broader concept of reading that you have acquired here, that would be one big step. These little tributaries can go to make the river. I hope you will meet the challenge boldly.

APPENDIX A

I. A Review of Indian Researches and Studies on Reading

This is a review of the research studies done at Indian universities and compiled by the N.C.E.R.T. in 'Educational Studies and Investigations in Indian Universities 1939-61' (Unpublished).

Among the research studies done at Indian universities, most are M.Ed. level theses or dissertations either in full or part fulfilment of the requirements of the universities concerned. Six are Ph.D. studies of which three pertain to studies of basic vocabularies of Gujarati children and three deal with reading as such and include:

- (a) Teaching Beginners to Read Kannada—An Experimental Study (1949)
- (b) Reading Interests of Marathi Boys and Girls at the Secondary School Stage (1953)
- (c) Formation, Administration and Standardization of Silent Reading Tests in Gujarati for students studying in classes VIII to XI. (1960)

Apart from these, one study is reported to have been conducted by the South Indian Teachers Union Council of Educational Research: 'An Investigation into the Reading Habit and Interest of Children and the Juvenile Literature' available and published in 1949. This body has also instituted a four year project on 'Child Development and Study of the Functional Vocabulary of Pre-school Children.'

The M.Ed. and Ph.D. studies of Indian universities related to reading have been classified under the following heads and are included in the bibliography that follows:

- i. Children's Vocabulary
- ii. Reading Interests
- iii. Language Development
- iv. Analysis of Language Texts
- v. Analysis of Children's Literature
- vi. Methods of Teaching Reading
- vii. Studies of Comprehension Ability
- viii. Tests
- ix. Remedial Reading

Among these, the largest number pertain to (i) Children's Vocabulary and (ii) Reading Interests. Synopses of these studies were available, and Sections II and III deal with these in some detail. As this review is confined to the problems of reading in the mother tongue, studies related to English have not been included in this compilation.

11. Studies in Vocabulary : A Brief Review

Among the vocabulary studies conducted in the training departments of the Indian universities the most outstanding are the doctoral level works of Lakdawala (5), Raval (14), Vakil (20). The main purpose of these studies was to find the recognition and reproduction vocabulary of Gujarati children at the age of 11+, 12+ and 13+ respectively. The recognition vocabulary was collected from the different textbooks (about half a dozen for each grade) prescribed by the Education Department for the fifth, sixth and seventh grades respectively. The words collected were then classified and grouped in the form of a frequency distribution.

The reproduction vocabulary was collected by getting the children to write an essay and a letter on selected themes chosen from the examination papers for the different years. The words reproduced by the children in their essays and letters were then analysed

and classified.

The words collected were then tried orally on a small sample. The selected words were put in the form of tests. These tests were then tried on a representative sample of 300 to 500 children. The words in both groups were sub-listed in eight to twelve groups on the basis of frequency and in alphabetical order indicating (a) the actual frequency against such words, (b) the credit, (c) the grammatical group or category, (d) the etymological group, (e) origin, and (f) structural word, etc.

The three studies present different lists of 1,000 words each for the age group 11+, 12+ and 13+ respectively.

Among the several other conclusions drawn from these studies, an important one is that nouns, adjectives and verbs predominate in both the recognition and reproduction vocabulary of children.

Some studies have been carried out at the M.Ed. level to find the vocabulary of children of lower age groups (5-11 years) in Hindi, Gujarati and Marathi. The techniques employed were:

1. Conversation with children on certain specific topics around their experiences.
2. Asking children to narrate any story.
3. Making children talk freely about pictures shown to them.
4. Recording children's verbalization during free play.
5. Analysing the written essays of children in the higher age group.

The sample used for these studies was around 100 children in each case.

The words collected were classified in different ways. Some of the important conclusions are the following:

1. Children in the lower age group (roughly 5 to 8

- years) mainly depend on nouns and functional verbs for expressing their thoughts.
2. There is a slight difference in the vocabulary of children from rural and urban areas.
 3. In the vocabulary of Marathi children (age 5 years) the influence of Sanskrit is the highest.
 4. Different studies reveal the differences in the quantity of vocabulary for the same age group.

III. Studies of Reading Interests : A Brief Review

About three dozen studies in the field of reading interests have been conducted by students in the different training colleges of the country during the past few years as part fulfilment of the M.Ed. degree.

Most of these studies try to explore the reading interests of boys and girls in the different languages—Hindi, Bengali, Marathi, Kannada, Gujarati and Panjabi. Generally, researchers have tried to investigate the reading interests of high school pupils. Very few studies have been conducted for the lower age group.

In almost all the studies, the questionnaire technique has been used except in a few cases where both questionnaire and interview have been used simultaneously. The sample selected for each study is something between 200 to 300 except in three cases where it ranges from 1500 to 2000 (13, 2, 1). Hardly any mention has been made about the representativeness of the sample used in the different studies. There is no indication of the reliability and the validity of the tools employed for investigation. The conclusions drawn are based on a simple analysis of the responses. A variety of conclusions have been drawn in each study. Some of the salient conclusions are given below:

1. There is a dearth of interesting books for children of different age and grade levels.
2. Girls at the high school stage do more extensive

and serious reading than boys. They like to read historical, patriotic, adventurous, scientific, social, detective and biographical stories. They prefer short stories.

3. Children's reading is related to their socio-economic conditions, their reading opportunities and their attitudes and inclinations.
4. Boys at the high school stage give their first preference to the reading of short stories, second to novels and the third to poetry. They show very little interest in reading essays or literature.
5. One of the conclusions of the study made by Barmeda (23) is interesting. Grouping the books broadly into 12 categories, the preference for boys and girls were as follows:

Boys	Girls
(1) Historical	(1) Story collections
(2) Story collections	(2) Stories about gods and demons
(3) Detective stories	(3) Historical stories
(4) Biographies	(4) Books about children
(5) Mythological stories	(5) Love stories
(6) Humorous and love stories	(6) Stories on social life
(7) Social stories	(7) Humorous stories
(8) Stories of birds and animals	(8) Biographies
(9) Stories of student life	(9) Stories of birds and animals
(10) Travel	(10) Detective stories
(11) Novels	(11) Travel
(12) Scientific books	(12) Novels
	(13) Scientific books.

6. From his study, Karwandikar (34) concludes that with increasing age Marathi boys as well as girls appear to take less interest in religious, historical,

adventurous and crime stories while interest in short stories, novels, travel, poetry, drama and essay seems to grow with age for both sexes. Sane Guruji, Hari Narayan Apte and Tamhankar are the most popular Marathi authors with all children. Boys take greater interest in reading newspapers than girls.

7. The best author as indicated by Punjabi boys (X class) are Vir Singh, Nanak Singh and Mohan Singh and those for Punjabi girls are Nanak Singh, Mohan Singh, Amrita Pritam and Vir Singh as reported by Sajan Singh (49).

IV. Suggestions for Future Researches

From a consideration of the studies in reading undertaken at universities upto date, it is evident that:

1. There is need for giving more attention to the selection of problems by students at Ph.D. and M.Ed. levels. It is laudable that the three Ph.D. studies of the Bombay University in vocabulary have tackled the same problem, viz., the spoken vocabulary of Gujarati children each for a different age group 11+, 12+ and 13+ one leading on to another and thus giving a total picture of one problem. But for this single exception, there is no evidence of continuity. It is desirable that when helping students select problems for research, this factor be borne in mind, viz., that of advising students to take into consideration the work already done in order to build up on it wherever possible making the total research programmes worthwhile. The less fragmentary the approach, the better would it be for the advancement of educational research in this country. Continuity can be both vertical and horizontal e.g. (a) if a particular study deals with the reading interests of pupils at the middle school stage

in a particular school system, it is worthwhile following it up with a similar study for the high school; or (b) if a study confines itself to the identification of reading difficulties at a particular level, another could supplement that by building up a remedial programme for the same.

2. There is need for identifying problems in reading from various angles in order to ensure coverage on a comprehensive scale. In the studies done up to date those on vocabulary, reading interests and analysis of language texts predominate. The other areas such as methods of teaching, specially the beginning of reading, remedial reading, tests of reading comprehension and other skills have merely been attempted at the fringe.

3. Similarly care should also be taken with respect to the techniques and tools employed in the investigations in order to ensure greater validity. It is evident from these studies that almost the same technique (specially the questionnaire) has been adopted in a large number of cases. Variety of approach is essential to make for greater conclusiveness in results.

4. While some attempt has been made to tackle reading problems at the middle school and high school stages, precious little is evident concerning the elementary stages. We need information about how our children learn to read, what methods are most suited for each language, what programmes will be beneficial.

5. Researches on reading are inter-linked with researches in linguistics and this is again an area that must necessarily arrest our attention. We need scientific descriptions of the Indian languages; we need interlanguage comparisons; we need basic data about the phonetics, vocabulary and grammar of all the Indian languages.

6. While problems of reading in mother tongue must necessarily take the prime place in our scheme of investigations, the question of stimulating

reading in the second language, be it English or any other Indian language, is also important. Research studies in these areas need to be linked to the former enquiries and thus supplement them.

7. Training institutions must encourage schools to take up action-researches in the different aspects of reading problems. There is great need for classroom experimentation in areas such as methods of teaching, the development of concepts in children, improvement in the speed of reading, the development of skills of reading.

APPENDIX B

A Classified Bibliography of Research Studies on Reading Conducted at Indian Universities

Children's Vocabulary

- Bhat, S. R. *An Inquiry into the Marathi Vocabulary Attainment of Children, Five to Nine Years Old in the City of Bombay*, Bombay 1959.
- Goel, M. (Kum.) *Reading Vocabulary in Hindi for Class I*, Allahabad, 1953.
- Katakwar, N.J. *Study of Marathi Vocabulary Used by Children in Tumsar (Age Group 6-Plus)* Nagpur, 1961.
- Khandadia, G.J. *The Reproductive Vocabulary in Gujarati of the Pupils who have Completed the Primary Course*, Bombay, 1951.
- Lakdawala, U.T. (Kum.) *The Basic Vocabulary of Gujarati Children at the age of 13 plus*, Bombay 1960.
- Lakdawala, U.T. (Kum.) *Gujarati Vocabulary of Children between 6 and 10 years*, Bombay, 1951.
- Munshi, S.B. *Vocabulary of 100 Gujarati Children of the Age-Group 4 to 6*, Bombay, 1958.
- Niranjan Nath. *Preparation of Basic Vocabulary in Hindi for the First Grade Students in Ambala Division*, Punjab, 1958.
- Parekh, B.U. *A Basic Vocabulary in Gujarati for Primary School Children (Age group 5 to 9) on the Basis of Word Frequency*, Baroda, 1957.
- Parsai, B.P. *An Investigation into the Reproduction Vocabulary in Hindi of Pupils at the Age of 11+ (class VI)*, Jabalpur, 1958.
- Prakash, C. *Vocabulary List in Hindi for Pupils of Grade VI and VII of Delhi Schools*, Delhi, 1958.
- Raini, N.S. *A Study of the Vocabulary of the Children of the 8 plus age-group*, Rajasthan, 1960.
- Ramchandra, R. (Smt.) *Study in Children's Vocabulary (with reference to children of 7 plus)*, Rajasthan, 1959.
- Raval, R.T. *The Basic Vocabulary of Gujarati Children at the age of 12 plus*, Bombay, 1959.
- Saraswat, M. (Kum.) *A Critical Study of Hindi Vocabulary for Grade II*, Allahabad, 1957.

- Seolekar, V.R. *The Reproduction Vocabulary (in Marathi) of Pupils who have completed the Primary Course*, Bombay, 1947.
- Shukla, D.S. *An Enquiry into the Influence of Chattisgarhi Dialect on the Active Vocabulary of Hindi at the Middle School Stage in Raipur District*, Saugar, 1960.
- Tiwari, G.P. *Determining the Basic Vocabulary for the Children of the Age Group 6 to 7 (Hindi)*, Jabalpur, 1961.
- Tiwari, J.P. *An Investigation into the Reproduction Vocabulary in Hindi of Pupils who have completed the Primary Stage*, Saugar, 1956.
- Vakil, K.S. *The Basic Vocabulary of Gujarati Children at the Age of 11 plus*, Bombay, 1955.
- Wadaskar, M.W. *Spoken Vocabulary of Marathi Children at the age of 5 plus*, Nagpur, 1960.

Reading Interests

- Aitiwdekar, M. (Kum.) *Reading Interests of Children in Marathi Upper Primary Schools*, Bombay, 1951.
- Barmeda, K.N. *Reading Interests of Gujarati Children Attending Upper Primary Schools (Standard V to VII)*, Bombay, 1951.
- Basaviah, N. (Smt.) *A study of Reading Interests of Adolescents of the Secondary Schools of Jullundur*, Panjab, 1955.
- Bhatia, B.D. *An Investigation into the Reading Interests of High School Students (Classes VIII, IX and X age range 12 to 16)*, Delhi, 1950.
- Chaturvedi, B.P. *A Study of the Reading Interests of High School Boys of Lucknow*, Lucknow, 1957.
- Esekial, N. (Smt.) *An Investigation into the Reading Interests of about 800 Adolescent Pupils in Two different Localities in the City of Bombay*, Bombay, 1961.
- Ghosh M. (Kum.) *Reading Interests of High School Girls*, Allahabad, 1949.
- Goberele, S.N. *Optional Reading and Reading Interests of Adolescent Students (Hindi)*, Saugar, 1960.
- Guha, P.R. (Smt.) *An Investigation into the Reading Interests in Bengali*.
- Ibrahim, M. (Kum.) *Children's Reading Interests (Age group 9-12 years) in Schools of Bhopal City*, Vikram 1959.
- Jasbir Kaur (Smt.) *A Study in the Interests of Pupils in Local High Schools of Aligarh*, Aligarh, 1959.

- Joshi, P.N. (Kum.) *Reading Interests of Gujarati Girls in Upper Secondary Schools*, Bombay, 1956.
- Kharwandikar, S.V. (Smt.) *An Investigation into the Reading Interests of Secondary School Children in Nagpur*, Nagpur, 1954.
- Lingajamani, A. (Smt.) *An Enquiry into the Reading Interests of Pupils at different age levels in some Secondary Schools of the Mysore State*, Madras, 1956.
- Manhor, P.M. (Smt.) *Reading Interests of Marathi Boys and Girls at the Secondary School Stage*, Bombay, 1953.
- Marr, E. (Kum.) *An Investigation into the Reading Interests of Adolescents*, Delhi, 1952.
- Mathew, S. (Smt.) *An Enquiry into the Reading Interest of the Pre-adolescent Children (of the age group 8-11) in the Schools of Kerala State*, Kerala, 1961.
- Misra, U. (Kum.) *An Investigation into the Reading Interests of Girl Students of IX and X Classes of Recognized Higher Secondary Schools of Lucknow*, Lucknow.
- Munshi S. (Smt.) *Reading Interests of Boys and Girls of Class VIII (in Udaipur Schools)*, Rajasthan, 1958.
- Narayana, K. *An Enquiry into the Reading Interests in Tamil among some high School Children of the city of Madras*, Madras, 1957.
- Nathaniel, J. (Smt.) *A study of the reading interests of high school pupils in Kannada medium schools, Paichur, Madras*, 1958.
- Pande, B.N.R. *Interests in General Reading of High School Pupils in some English Medium classes in Madras*, Madras, 1956.
- Pant, N. (Kum.) *Reading Interests of the Student of Class VIII (Hindi Prose)*, Allahabad, 1954.
- Patil, V. (Smt.) *Reading Interests of High School Children* Bombay, 1954.
- Philip, A.R.S. (Smt.) *An Investigation into the Reading Interests of High School Pupils*, Madras, 1954.
- Ram Chandra. *Investigation into the Reading Interests of IX Class Students in Udaipur High Schools*, Rajasthan, 1957.
- Roy, I. (Smt.) *An Investigation of the Reading Interest of Boys and Girls of Class X of Delhi State in Newspapers and Periodicals*, Delhi, 1957.
- Sajan Singh. *An Investigation into the Reading Interests in Punjabi of Boys and Girls of Class X of the High Schools in the Rupar Sub-Division Ambala, Panjab*, 1958.

Sandilya, R.R. *An Investigation into the Reading Interests of the students of Classes IX, X and XI of Higher Secondary Schools in Chatarpur District*, Saugar, 1961.

Satpathy, M.C. *An Investigation into the Reading Interests of VI and VII Grade Children*, Utkal, 1959.

Srivastava, Y.K. *Investigation into the Reading Interests of High School Students of Sardarshahr and Suggestions to Improve them*, Rajasthan, 1959.

Subbaramayya, M.S.V. *A Scientific Study of Reading Interests of High School Pupils*, Andhra, 1960.

Thakur, R.S. *An Investigation into the Reading Interests in Hindi of Pupils of Classes X and XI of Secondary Schools in Bihar (Darbhanga and Muzzafferpur)*, Delhi, 1956.

Language Development

Javli, V.K. *Measurement of Linguistic Ability of Primary School Children*, Bombay, 1945.

Johri K. (Kum.) *Language Development During the Nursery Years*, Allahabad, 1957.

Khalida Rehana, (Kum.) *Language Development in Pre-School Children*, Osmania, 1959.

Merchant, S.J. (Kum.) *The Language Development of Gujarati Speaking Rohra Girls of Standard IV of a Typical Rohra Girls' School*, Bombay, 1961.

Subhramanya, N. *Language Development of Nursery School Children in Mysore*, Mysore, 1961.

Analysis of Language Texts

Balbir Pershad. *Common Words Used in Urdu and Hindi Text-Books for Primary Schools (Urdu)*, Osmania, 1941.

Brahanandam U.K. *A Critical Examination of Textbooks for detailed study in Telugu at the Middle School Stage with special reference to Vocabulary and Grammar*, Madras, 1954.

Brahmbhat, K.U. *A Critical Survey of Gujarati Language Textbooks for the Standards VIII, IX and X in the Old Bombay State*, Bombay, 1959.

Das, M. *Writing of Textbooks for Teaching of Mother Tongue in the Primary Classes of Orissa*, Utkal, 1958.

Gokli, N.K. (Kum.) *A Critical Survey of Hindi Language Textbooks for Standards VIII, IX and X*, Bombay 1959.

Jaswant Singh. *A Critical Analysis of the Prescribed Textbooks*

in Punjabi (First Language) for the Upper Middle Class i.e. VII and VIII Classes, Panjab, 1961.

Joshi, N.P. *A Critical Review of the Gujarati Textbooks (Poetry Section) for Secondary School Pupils of Standards V to X (Gujarati)*, Gujarat, 1957.

Joshi, U.J. (Kum.) *Critical Review of Gujarati Textbooks (Prose Section) for Secondary School Pupils of Standard V to X (Gujarati)*, Gujarat, 1955.

Kapoor, S. (Kum.) *An Analysis of Hindi Poetry prescribed for High School Girls*, 1951.

Kapoor V. (Kum.) *Suitability of Present English Textbooks for High School Classes*, Allahabad, 1961.

Kazmi, S. (Kum.) *A Study of Primary Textbooks in Urdu*, Allahabad, 1957.

Krishnaveni, P. (Smt.) *A Critical Analysis of some Approved Textbooks in Kannada (First Language) for Middle Schools*, Madras, 1950.

Pandya, P.R. *A Critical Survey of the Textbooks in Gujarati of Standards V-VII*, Bombay, 1959.

Patel, P.A. *A Critical Study of Hindi Textbooks in the Secondary Schools of Bombay State*, Gujarat, 1959.

Pathak, M.V. *A Critical Study of Marathi Prose and Poetry Textbooks in High Schools in the Bombay State with Suggestions for Improvements*, Poona, 1955.

Prasad, M. (Kum.) *An Investigation into the Suitability of Hindi Textbooks in Schools in Bihar (Class I) Patna*, 1961.

Ranganathan, V.V. *A Critical Examination of Textbooks in Tamil for detailed Study in Forms I to III with Special Reference to the Vocabulary employed*, Madras, 1953.

Rattaiah, V. *A Critical Study of the Textbooks in Telugu Language for Form IV or IX class*, Andhra, 1956.

Saraswat, H.S. *Content-Analysis and Evaluation of Textbooks in Hindi*, Aligarh, 1960.

Sethi, V. (Smt.) *A Critical Analysis of the Hindi Textbook Prescribed by the Punjab Education Department for Fifth Class in Hindi Region in the Light of Present Day Aims of Teaching Hindi as Mother-tongue*, Punjab, 1959.

Shah, D.R. *Supplementary Reading Material in Gujarati for Primary School Children (Classes I to VII)*, Baroda, 1959.

Sharma, H.L. *A Critical Survey of Textbooks in Hindi Class*

VI, VII and VIII (M.P. & U.P.) Hindi, Vikram, 1960.

Trivedi, J. I. (Kum.) *A Critical Examination of the Gujarati Textbooks Prescribed for Standards VIII, IX and X by the Department of Education, Gujarat State, Baroda*, 1961.

Vaidya, P.R. *A Critical Survey of the Textbooks in Gujarati for Standard V, VI and VII*, Bombay, 1959.

Wahid, G.R. (Kum.) *Urdu Short Stories in H.S. Supplementary Course*, Allahabad, 1954.

Analysis of Children's Literature

Dixit, B.D. *The Psychological Basis of Child Literature (5-12 years)*, Allahabad, 1950.

Dwivedi, J. (Smt.) *Hindi Juvenile Literature (Hindi)*, Varanasi, 1952.

Gupta, R.K. *Evaluation of Children's Literature in Hindi in Bihar (Hindi)*, Patna, 1960.

Moses, E.B. (Kum.) *Children's Literature—A Study*, S.N.D.T. Women's University, 1959.

Rath, H.K. *Children's Books in Oriya*, Allahabad, 1957.

Sahu, D.P. *Poetry for Children*, Patna, 1958.

Sharma, C.P. *Study of Children's Literature in Hindi*, Rajasthan, 1954.

Sharma, K.K. *A Critical Analysis of Children's Literature in Hindi*, Nagpur, 1955.

Shastree, A.V. *A Study of the Juvenile Literature (Stories) in Marathi for Pupils upto the Pre-Adolescent Age-group 6 to 12 plus*, Nagpur, 1956.

Methods of Teaching Reading

Awasthi, D.D. *An Experimental Study of the Comparative Utility of the Ideal Method and Word-Meaning Method of Teaching Hindi Poetry in IX Class or Secondary Schools of Rewa (Hindi)*, Saugar 1961.

Chaudhry, S. (Smt.) *The Problem of Teaching Rapid Reading in Hindi in High Schools*, Patna, 1955.

Chauhan V. (Smt.) *Some Difficulties in the Introduction of the New Hindi Script in the Primary Classes of Basic Schools of Lucknow City*, Lucknow, 1958.

Choksi, S.J. *A Comparative Study of the Effectiveness of the Methods of the Teaching of Writing Gujarati Alphabet to Illiterates*, Baroda, 1956.

Dube, V. (Kum.) *An Experiment in Hindi-reading (Hindi)*, Gorakhpur, 1959.

Javli, V.K. *Teaching Beginners to Read Kannad—An Experimental Study*, Bombay, 1952.

Mehendale P.P. *The Teaching of Hindi—An Experimental Study*, Bombay, 1952.

Subrahmanyam, V.K. *Methods and Problems in the Teaching of Tamil in Elementary Schools*, Madras, 1947.

Verma, B.P. *Examination of the Different Methods of Teaching Hindi (Hindi)*, Patna, 1959.

Studies of Comprehension Ability

Barve, H.A. (Smt.) *A Study of Listening Comprehension of Pupils in VII and VIII Classes of Marathi Secondary Schools*, Nagpur, 1961.

Joshi, D.L. *A Study of Mechanical Comprehension of Pupils of Class IX in Nagpur Schools*, Nagpur, 1960.

Muthulakshmi, S. R. (Smt.) *A Study of the Methods and results of Testing Comprehension in English in Form IV*, Madras, 1959.

Sharma, V. (Smt.) *Testing the Attainment in Hindi of Gujarati Children in Secondary Schools of Bombay from Standards IX to XI with Special Reference to Their Reading and Comprehension Abilities*, Bombay, 1958.

Sondhi, V.P. (Smt.) *A Study of Silent Reading Comprehension of Pupils of VII Class of Hindi Secondary Schools*, Nagpur, 1961.

Tijoriwala, I.B. (Kum.) *Reading and Comprehension Ability of Gujarati Children in the Group of 14 to 16 Years*, Bombay, 1961.

Tests

Bhagatwala, J.A. *Formation, Administration and Standardization of Silent Reading Tests in Gujarati for Students Studying in Classes VIII to XI*, Baroda, 1960.

Bhatnagar, K.K. (Kum.) *A Hindi Vocabulary Test for Students of Class VI*, Lucknow, 1954.

Dabool, J.D. (Kum.) *A Standardized Vocabulary Test for Indian Children of the Age-group 12-14 years*, Bombay, 1950.

Remedial Reading

Agarwal, R.N. *Reading Tests and Diagnosis of Reading Difficulties (Children of Class VI, of Nearly 11 plus)*, Rajasthan, 1957.

Swamidoss, G. (Smt.) *A Consideration of Backwardness in Reading among School Children—the Causes of such Backwardness and Suggestions for Remedial Measures*, Madras, 1945.

APPENDIX C

An Annotated Bibliography on Reading

Austin, Mary C. and Morriam, Coleman. *the First R.*, Macmillan, New York, 1963.

Harvard study of Current Practices in Teaching Reading in Elementary Schools in the United States.

Austin, Mary al. *Reading Evaluation*. Ronald Press, New York, 1962.

Formal and Informal Ways of Evaluating the Pupils' Progress.

Abraham, Wallard. *A New Look at Reading: A guide to the Language Arts*. Porter Sargent, Boston, 1956.

A Compilation of Articles on Teaching Reading.

Anderson, Irving H and Dearborn, Walter. *The Psychology of Teaching Reading*. Ronald Press, New York, 1962.

Research findings relating to the teaching of reading.

Artley, A Sterl. *Your Child Learns to Read*. Chicago. Scott Foresman, 1953.

Simple Explanation of basal reading instruction for parent consumption.

Blair, Glem Myers. *Diagnostic and Remedial Teaching. A guide to practice in elementary and secondary schools*. Macmillan New York, 1956.

Methods of teaching basic skills to retarded secondary school students.

Bamman, H.A., Hogan, Ursula, and Greene C.E. *Reading Instruction in the Secondary School*. Longmans, Green and Company, Inc., New York, 1961.

Reading instruction for secondary school students.

Betts, Emmett Albert. *Foundation of Reading instruction* American Book Co., New York, 1957.

Elementary school reading instruction.

Barbe, Walter B. *Educator's Guide to Personalized Reading Instruction*. Prentice-Hall, Inc. Englewood Cliffs, New Jersey, 1961.

Reading programme based upon children's personal choice of books.

Bond, G.L., and Tinker, M.A. *Reading Difficulties: Their Diagnosis and Correction*. Appletton-Centuary Crafts, New York, 1957.

Practical and theoretically sound presentation for teachers at all levels.

Bond, G.L. and Wagner, Eva B. *Developmental Reading in High*

School. Macmillan, New York, 1956.

Reading instruction for all secondary school students in all subjects.

Bond, Guy L. & Wagner, Eva B. *Teaching the Child to Read.* Macmillan, New York, 1960.

Elementary school reading instruction.

Bond, Guy & Handlan, B. *Adapting Instruction in Reading.* University of Minnesota Press, Minneapolis.

A study of reading interests.

Broom, M.E., Duncan, M.A.A., Emig, D., and Stueban, J. *Effective Reading Instruction in the Elementary School.* MacGraw Hill, New York, 1951.

Elementary School reading instruction.

Brown, M.M. *Learning Words in Context—a work-book for building vocabulary.* Chandler Pub. Co., San Francisco.

Building the meanings of new words by observation of their use in sentences.

Bullock, Harrison. *Helping the Non-Reading Pupil in the Secondary School.* Teachers' College, Columbia University, New York, 1956.

Methods of teaching illiterates at the Secondary Level. Bureau of Public Schools. *Outline of the Courses of Study in Reading.* Bureau of Printing, Manila, 1954.

Elementary school reading instruction.

Burton, W.H., Baker, C., and Kemp, G.K. *Reading and Child Development.* Bobbs-Merrill Co., Inc., Indiana Polis, 1956.

Elementary school reading instruction.

Carmichael, Leonard and Dearborn, Walter F. *Reading and Visual Fatigue.* Houghton Mifflin, New York, 1947.

A study of relationship.

Causey, O.S. (Ed.) *The Reading Teacher's Reader.* Ronald Press Co., New York, 1958.

A compilation of speeches by reading specialists.

Carter, Homer J.L. and McGinnis, Dorothy. *Learning to Read A Handbook for Teachers.* McGraw Hill, New York, 1953.

For the reading clinician primarily.

Cleary, F.D. *Blueprints for Better Reading.* H. W. Wilson Co., 1957.

One of several special approaches to teaching reading

Chall, J.S. *Readability an Appraisal of Research and Application* Ohio University Press, Ohio, 1958.

Summary of research findings on readability.

Daniels, J.C. and Diack, H. *Standard Reading Tests* : Chatto and Windus, London, 1958.

A New Approach to building reading tests.

Darrow, Helen F., and Howes, V.M. *Approaches to In-*

dividualized Reading. Appleton Century Crafts, Inc., New York, 1960.

Teaching reading through the child's own choices of reader material.

Dawson, Mildred A. and Howes, V.M. *Approaches to individualized Reading*. Appleton Century Crafts, Inc., New York, 1960.

Elementary school reading instruction geared to a basal reader series.

Dever, Kathryn Imogene. *Positions in the Field of Reading Teachers' College*. Columbia University, New York, 1956.

A descriptive study of jobs available to reading specialists.

DeBoer, J.J. and Dallmann, Martha. *The Teaching of Reading*. Rinehart and Winston, Inc. New York, 1960.

Elementary School reading instruction chapters of theory paired with chapters on practice.

Delacatos, C.H. *The Treatment and Prevention of Reading Problems: The Neuropsychological Approach*. Charles C. Thomas, Springfield, Ill., 1959.

A specialized approach (as opposed to an eclectic approach).

Diack, Hunter. *Reading and the Psychology of Perception*. Peter Skinner, Nottingham, 1960.

A system of teaching reading based largely on the sound structure of words.

Dolch, E.W. *Problems in Reading*. Garrard Press, Illinois, 1948.

One of many books by this author to help the classroom teacher to improve the child's reading.

Dolch, E.W. *Psychology and Teaching of Reading*, 2nd ed. The Garrard Press, Illinois, 1959.

By an advocate of word and sound approaches to reading.

Dolch, E.W. *Teaching Primary Reading* 2nd ed. The Garrard Press, Champaign, Illinois, 1950.

By an advocate of word and sound approaches to reading.

Ducan, John. *Backwardness in Reading remedies and preservation*. George G. Harrap, London, 1933.

For the clinician.

Durrell, D.D. *Improving reading Instruction* World Book Co., New York, 1956.

Elementary school reading instruction.

Ephron, Beulah K. *Emotional Difficulties in Reading*. The Julian Press, Inc., New York, 1953.

The only book confining itself to case studies of college students whose reading problems involve emotional blocks.

Fernald, G.M. *Remedial Techniques in Basic School Subjects*. MacGraw Hill, New York, 1943.

A multi-sensory approach to teaching reading.

Figurel, J. Allen. (Editor) *Changing Concepts of Reading Instruction*. International Reading Association Conference Proceedings Vol. VI 1961. Scholastic Magazines, New York.

Compilation of useful discussions by eminent reading specialists.

Figurel, J. Allen. (Editor) *Reading as an Intellectual Activity*. International Reading Association Conference Proceedings Vol. III 1963. Scholastic Magazines, New York.

Compilation of useful discussions by eminent reading specialists.

Flesh, Rudolf. *Why Johnny Can not read and what you can do about it*. Harper, New York, 1955.

A phonics approach to teaching reading.

Fox, Lorene K., and Brogan, Peggy. *Helping Children Read*. Holt, Rinehart and Winston, Inc., New York, 1961.

Teaching reading through the child's non-choices of reading material.

Fries, C. *Linguistics and Reading*. Holt, Rinehart and Win-slow Inc., New York 1962.

A descriptive survey of linguistic knowledge and its implications for reading.

Gates, Arthur-I. *Improvement of Reading: A programme of diagnostic and remedial methods*, 3rd ed. New York: Macmillan, 1947.

A classic in developmental and remedial reading; the reading process and diagnostic techniques.

Gates, Arthur I. *Teaching Reading* National Education Association, 1953.

Highlights of research for the classroom teacher of reading.

Gill, W.S. and Gill Kathlean. *Phonic side of Reading*. London: Cassell, 1952.

Gilbert L.C. *Functional Motor Efficiency of the Eyes and its relation to Reading*. Berkeley, California: University of California Press, 1953.

Study of eye movement.

Gerrard, Margaret G. and M. C. Innes, John. *Improving Your Teaching of Reading Skills*. Thomas Nelson and Sons, Canada, 1960.

Grly, William S. and Rogers, Bernice. *Maturity in Reading—its nature and appraisal*. Chicago: Chicago University Press, 1956.

A study of adult reading skills and habits; the develop-

ment of a definition of maturity in reading (in a sense, a description of the comprehensive goals of reading)
 Gray, William Scott. *Psychology of Elementary School Subjects*. New York: Prentice-Hall, 1942. (Psychology of Reading pp. 1-74)

Gray, W.S. *On Their own in Reading*, 2nd ed. Foresman & Co., Chicago, 1960 Scott.

Analysis of words by phonics, structure and context: a presentation buttressed by research.

Gray, William S. *Teaching of Reading and Writing: An International Survey*. Unesco Publications, Paris, 1956.

Survey of practices in the teaching of reading in 17 languages.

Gray, Lillian, and Reese Dora. *Teaching Children to Read*. (Revised): Ronald Press, New York 1957.

Elementary school reading instruction.

Harris, A.J. *How to Increase Reading Ability*. McGraw Hill, New York, 1961.

Developmental and remedial reading.

Harrison, Joan. *Learning to Read*. Longmans, London, 1960.
 Hanna G.R., McAllister, H.K. *Books Young People and Reading Guidance*, Harper & Bros. Publishers, New York 1960.

Children's Literature.

Hester, K. B. *Teaching Every Child to Read*. Harper & Bros., New York, 1955.

Elementary school reading methods: an experience approach

Heilman, A.W. *Principles and Practices of Teaching Reading*. Charles E. Merrill Books, Columbus, Ohio: Inc., 1961.

Elementary school reading methods; comments on sex differences.

Hildreth, G. *Teaching Reading*. Henry Holt, New York, 1958.

Elementary school reading methods.

Hildreth, G. *Readiness for School Beginners*. Harcourt, Brace and World Inc., New York, 1950.

All types of readiness including reading readiness.

Hunnicut, C.W. and Iverson, William J., eds. *Research in the Three R's*. Harper, New York, 1958.

Classic research studies in reading, writing and arithmetic, condensed and printed for scholars

Judson, H. *Techniques Reading*. Harcourt, Brace and World Inc., New York, 1964.

Elementary school reading methods.

Kirk, S.B. and Monroe, M. *Teaching Reading to Slow Learning Children*. Houghton Mifflin Co., Massachusetts, 1940.

Elementary reading instruction for the less bright child

Kottmeyer, W. *Teacher's Guide for Remedial Reading*. St. Louis, Webster Publishing Company, Missouri, 1959.

Emphasis upon word recognition and word analysis

Lazar, May., Draper, M.K. and Schwiebert, L.H. *A practical guide to Individualized Reading*. Publication No. 40 Board of Education, Bureau of Educational Research, New York, 1960.

Teaching reading through child's own choices of material

Lazar, M.(ed.) *The Retarded Reader in the Junior High School*. Publication No. 31, Board of Education, Bureau of Educational Research, New York, 1952.

Methods of dealing with retarded readers in secondary schools

Leedy, Paul D. *Reading Improvement for Adult*. McGraw Hill, New York, 1956.

Skill builder

Luckiesh, Mathew and Moss, Frank K. *Reading as a Visual Task*. Chapman and Spell, London 1942.

Reading as a physiological task.

Malmquist, E. *Factors Related to Reading Disabilities in the First Grade of Ele. School*. Alangquish and Wickeell, Stockholm: 1958.

Report of studies in Sweden.

Mckim, Margaret G. *Guiding growth in Reading in the Modern Elementary School*. Macmillan, New York, 1956.

Elementary school reading instruction (electric)

McEathron, Margaret. *Your Child can Learn to Read: A simplified Course in Phonics*. Cakland, Reading House, California, 1952.

One of the better phonic approaches.

McKee P. *The Teaching of Reading in the Elementary School*. Houghton Miff, Co., Boston, 1948.

Elementary school reading instruction

McKillop, A.S. *The Relationship between Reader's Attitudes and Certain Types of Reading Responses*. Columbia University, New York, 1952.

Study of influence of attitude on interpretation of what is read.

McCullough, Constance M. *Reading Review of Educational Research* v, 28: p. 96-106 April, 1958.

Summary of teaching research studies 1955-58 in the U.S.A.

Metropolitan School study Council, New York. *Five Steps to Reading Success in Science, Social Studies and Mathematics*. The author, New York: 1954.

Practical ideas collected for use in secondary schools.

Ministry of Education: *Reading Ability*. Her Majesty's

Stationery Office, London, 1953.

Monroe, Marion. *Children Who Cannot Read: the analysis of reading disabilities and the use of diagnostic tests in the instruction of retarded readers*. Chicago University Press, Chicago, 1932.

Study of retarded readers

Monroe, M. *Growing into Reading*. Foresman and Company, Chicago Scott, 1951.

Readiness and beginning reading, understandable by parents.

Moore, E.H. *Fives at School. Teaching in the Kindergarten*. G. P. Putnam's Sons, New York

Kindergarten for children of different backgrounds

Morris, J.M. *Reading in the Primary School*. Publication No. 12 of the National Foundation for Educational Research, Newens, London, 1959.

National Society for Study of Education. *Adapting the Schools to Individual Differences, Part II*. Twenty-fourth Yearbook. Public School Publishing Chicago, 1925.

Concept of Readiness and its implications for teaching reading.

_____. *The Teaching of Reading, Part I*. Thirty-Sixth-Yearbook. University of Chicago Press, Chicago; 1937

Teaching of reading based on the broader point of view of reading.

_____. *Reading in the High School and College*. Part II. Forty Seventh Yearbook. University of Chicago Press Chicago, 1948.

Reading instruction and materials at High School and College level.

_____. *Reading in the Elementary School*. Part II. Forty-eighth yearbook. University of Chicago Press, Chicago, 1949.

Reading instruction and materials at elementary level endorsed by experts.

_____. *Development in and through Reading*. Part II. Sixtieth yearbook. University of Chicago Press, Chicago, 1961

Latest summary of good reading practices in teaching reading in the U.S.A.

Orton, Samuel Torray. *Reading, Writing and Speech Problems in Children. A presentation of certain types of disorders in the development of language faculty*. New York: W.W. Norton, 1937.

Point of view advocating a kinaesthetic approach.

Perterson, Eloanor M. *Aspects of Readability in the Social Studies*. New York: Teachers' College Columbia University, 1954.

What social studies teachers should know about the difficulty of their textbooks.

Richards, Charles Cranston. *Provision of Popular Reading Materials*. Paris: Unesco Publication 1959. (Monographs on Fundamental Education).

Richards, I.A. *How to Read a Page*: London, Kegan Paul, 1943.

A linguist's advice to a reader.

Robinson, H.M. *Evaluation of Reading*. University of Chicago Press, Chicago.

Robinson, H.M. *Sequential Development of Reading Abilities*. University of Chicago Press, Chicago: 1960.

A University of Chicago Reading Conference Bulletin.

Robinson, H.M. *Materials for Reading*. University of Chicago Press, Chicago.

A University of Chicago Reading Conference Bulletin.

Robinson, H.M. *Why Pupils fail in Reading*. University of Chicago Press, Chicago, 1946.

A Study.

Russell, David H. *Children's Thinking*, Ginn, Boston, 1956.

Summary of findings on children's thought processes.

Russell, David H, Karp & Etta. *Reading Aids Through the Grades*, T. C. Columbia University, New York, 1954.

Reading activities classified by teaching purpose.

Schonell, Fred. *Backwardness in the Basic Subject*; 4th ed. Oliver and Boyd, Reading pp. 122-277, London, 1949.

British point of view on reading.

Schonell Fred. *Psychology and teaching of Reading*, 4th ed. Oliver and Boyd, London, 1961.

Research findings in the teaching of reading.

Scottish Council for Research in Education. *Studies in Reading, Vol. I & II*. University of London Press, London, 1948.

A useful compilation of British researches in reading.

Shaw, P.B. *Effective Reading and Learning*. Thomas Y. Cromwell Co., New York, 1955.

Skill builder.

Simpson, E.A. *How to use the Reading Accelerator*: Science Research Associates, West Grand Avenue, Chicago: 10.

Manual for teachers who use the reading accelerator a mechanical device for increasing reading speed.

Simpson, E.A. *Helping High School Students Read Better* Science Research Associates, Inc. 1954.

For teachers of secondary school students.

Spache, George D. & Berg. Paul C. *Art of Efficient Reading*. New York: MacMillan, New York 1955.

Skill builder.

Spache, George. *Resources in Teaching Reading*. Gainesville,

Florida: Reading Laboratory and Clinic, University of Florida, pp. 11-108, Gainesville, 1955.

Bibliography of materials and ideas for the teachers.

Spache, G.D. *Good Books for poor Readers*. Reading Laboratory and Clinic, University of Florida, Gainesville, 1954.

Bibliography of books for readers who have interests and their age level but low reading ability.

Spalding, Romalda B., and Spalding, W.T. *The Writing Road to Reading*. Whiteside, Inc., and William Morrow and Co., New York, 1957.

A phonic writing approach to reading.

Smith, D.E.P and Carrigan, Patricia. *The Nature of Reading Disability*. Harcourt, Brace and World, Inc., New York, 1960.

Application of drugs to retarded readers.

Smith, Henry P. and Dechant, Emerald V. *Psychology in Teaching Reading*. Prentice-Hall, New York, 1961.

Latest American treatment of this subject.

Steward, L.J. etc. *Improving Reading in the Junior High School*. Appleton Century Crafts Inc. New York.

A library approach to reading improvement.

Strang, Ruth and Bracken Dorothy K. *Making Better Readers*. D.C. Heath and Company, Boston, 1957.

Practical ideas for improving reading from upper elem. through high school.

Strang and Linguist, D.M. *The Administrator and the Improvement of Reading*. Appleton-Century Crafts, Inc., New York, 1960.

Ways in which the school administrator can improve the reading program in two school.

Strang, Ruth. *Study type of reading exercises*. Australian Council of Educational Research, 1954, Melbourne, 1954.

Skill builder.

Strang, Ruth, McCullough C.M., and Traxler A. *Improvement of Reading 3rd ed.* McGraw-Hill, New York, 1961.

Improvement of reading at all levels: elementary, middle and high.

Templin, Mildred. *Certain Language Skills in Children*. Minneapolis: University of Minnesota Press, Minneapolis, 1957.

Study of vocabulary and speech of children ages 3-8. replication of famous McCarthy study of 30 years ago.

Tinker, Miles A. and McCullough, C.M. *Teaching Elementary Reading* (Appleton) New York: 1962.

Elementary reading instruction—with practical suggestions.

Tooze, Ruth. *Your Children want to Read*. Prentice Hall Inc., New York, 1957.

Children's literature.

Traxler A., and Tocssend: A Eight More Years, of Research in Reading. Educational Records Bureau, New York, 1955.

Summary of research 1946-1954.

Triggs, Francis Oralind. *Improve Your Reading: a manual of remedial reading exercises*: University of Minnesota Press, Minneapolis, 1957.

Skill builder.

Triggs, Frances O., Reading. *Kindergarten through College* Mountain Home, N.C. publication: The author (Chairman: Committee on Diagnostic Reading Tests, Inc., 1960.

Developmental reading K-16

Veatch, Jeannette. *Individualizing Your Reading Programme*. Putnam's Sons, New York, 1959.

Teaching reading through child's own choices of material a compilation of articles by writers in the field.

Vernon, M.D. *Backwardness in Reading. A study of its nature and origin*. Cambridge University press, London, 1957.

Analysis of reading retardation, stressing phonic lacks.

Watts, A.F. *The Language and Mental Development of children* Harrap & Co., London, 1948.

Summary of studies of child development in intelligence and language.

Witty, Paul. *Reading in Modern Education* D. C. Heath, Boston, 1949.

Developmental reading all through the schools.

Woolf M.D. and Woolf, J.A. *Remedial Reading. Teaching and Treatment*, McGraw Hill New York, 1957.

Reading retardation, recognizing emotional factors.

Yoakam, Gerald A. *Reading Instruction*. McGraw Hill New York, 1955.

Elementary school reading interest.

APPENDIX D

A Select List of Achievement and Diagnostic Tests In Reading

American School Reading Readiness Test: (Revised) Bloomington, Illinois, Public School Publishing.

Kindergarten—Beginning grade 1.

Bond, Clymer and Hoyt Developmental Reading Tests, Chicago, Lyons and Carnahan, 1955.

Part I, II and III (for middle of grade 1)

California Reading text: Ernest W. Tiegs and Willis W. Clark; Los Angeles, California Test Bureau, 1957.

Lower Primary, grades 1, 2, Primary, grades 3, lower 4; Elementary, grades 4-6; Junior high grades 7-9; Advanced grades 9-14.

Chapman-Cook Speed of Reading Test: Minneapolis, Minnesota; Educational Test Bureau.

Grades 4-8.

Cooperative English Tests, Princeton, New Jersey, Educational Testing Service, 1960

Reading Comprehension tests for lower level for senior high school, three forms; higher level for grades 11 and 12 four forms.

Chicago Reading Tests: Eau Claire, Wisconsin, E. M. Hale Co. **Test A, grades 1 and 2; Test B, grades 2-4; Test C, grades 4-6; Test D, grades 6-8.**

Cooperative Vocabulary Test: Princeton, New Jersey, Educational Testing Service.

For grades 7 through 12

Davis Reading Test: New York the Psychological Corporation.

High school juniors, seniors and college freshmen.

Diagnostic Reading Tests: Chicago, Science Research Associates, 1947.

For junior high school through college freshmen.

Detroit Reading Test: New York, World Book Co.

Test I, grade 2; Test II, grade 3; Test III, grades 4-6; Test

IV grades 7-9

Detroit Word Recognition Test: New York, World Book Company.

Grades 1-3

Developmental Reading Tests: Chicago, Lyons and Carnahan. **Readiness test, beginning first grade; Primer, basic vocabulary test, lower primary, basic vocabulary test;**

Upper primary basic vocabulary test; Intermediate for grades 4-6.

Diagnostic Reading Tests: Mountain Home, North Carolina, Committee on Diagnostic Reading Tests.

Higher level, grades 7-13; Lower level, grades 4-6; Kindergarten through grade 4 (reading readiness)

Dolch Basic Sight Word Test: Champaign, Illinois, Garrard Press.

For Primary grades.

Gates Reading Diagnosis Tests, New York; Bureau of Publications, Teachers College, Columbia University.

For primary grades.

Gates Reading Readiness Test; Gates Reading Tests, New York, Bureau of Publications, Teachers College, Columbia University.

For beginners and kindergarten.

Gilmore Oral Reading Test: New York, World Book Company.

Grades 1 through 8.

Ginn Basic Reading Tests: McCullough, C.M. and Russell, D.H. Boston: Ginn, 1961.

Pre-school through Grade VII: a battery of Readiness and Achievement Tests for each grade—a sample of tests accompanying a basal reader series.

Gray Standardized Oral Reading Check Tests: Gray Standardized Oral Reading Paragraph Tests, Bloomington, Illinois, Public School Publishing Co.

Grades 1-8.

Iowa Silent Reading Tests (new edition) Ercene, H.A. and Kelley, V.H. New York: World Book Company, 1943.

Four forms for grades 9 to 13 Advanced tests.

Kelley-Greene Reading Comprehension Tests: New York, World Book Co., 1952.

McCullough Word Analysis Tests, G. Boston: Ginn, 1961

For Grades IV through College.

Metropolitan Achievement Tests, Revised, Tarrytown, New York, World Book Company.

Primary I Battery of grade 1; Primary II battery, grade 2; Elementary Reading; grades 3 and 4 Intermediate Reading, grades 5 and 6; Advanced Reading, grades 7 and 8.

Metropolitan Readiness Tests: New York, World Book Company.

Beginning first grade or end of kindergarten.

Monroe Diagnostic Reading Examination: Chicago, Illinois, C.H. Stoelting Company.

Poor readers of any age.

Monroe Revised Silent Reading Tests: Bloomington, Illinois,

Public School Publishing Co.,

Test I grades 3-5; Test II, grades 6-8; Test III, high school
Reading Readiness Tests for Each Level: McCullough, C.M.
and Russell, D.H. Boston: Ginn 1952-1957.

Pre-reading through six grades.

Sequential Tests of Educational Progress (Known as STEP):
Princeton, New Jersey, Educational Testing Service Coopera-
tive Test Division.

Level 4, grades 4-6; Level 3, grades 7-9; Level 2, grades
10-12 Level 1, College.

Silent Reading Diagnostic Tests, Chicago Illinois, Lyons and
Carnahan.

Grades 3 and up.

Stanford Achievement Tests: New York, World Book Com-
pany.

Primary Battery, grades 1.9-3.5; Elementary Reading
Test, grades 3.0-4.9; Intermediate Reading Test, grades
5, 6; Advanced Reading Test, grades 7-9.

Standish Reading Test Form NS451: London, National Founda-
tion for Educational Research in England and Wales, National
Survey of Attainments, 1960.

Traxler High School Reading Test: Bloomington, Illinois,
Public School Publishing Company.

For grades 10, 11, and 12.

Traxler Silent Reading Test: Bloomington, Illinois, Public
School Publishing Company.

For grades 7 to 10.

APPENDIX E

A List of the Projects Initiated at the Summer Course

A critical Analysis of the Textbooks in Hindi for Primary Classes

U.P	G. N. Srivastava
M.P.	P. N. Khare
Rajasthan	R. S. Solanki
Bihar	K. B. Dubey

Preparation of Achievement Tests in Hindi Reading for Class I

M. S. Rawat and R. S. Pandey

An Analysis of the Vocabulary of Pupils of the First Grade

D. R. Chaturvedi

An Analysis of the Concepts of Pupils of the First Grade

S. N. Shastri

S. N. Nigam

Development of Teacher Training Courses in the Teaching of the Mother Tongue

Primary Teachers

H. P. Rajguru

Secondary Teachers

D. C. Mishra

Preparation of a Questionnaire for a Survey of Problems of Reading at the Primary Level

P. C. Jain

A Critique on the present position of school libraries at the primary level in Delhi

P. D. Sharma

Developing Exercises to help pupils learn the *Khari boli* forms of select words in the local *Kumauni Dialect*

D. D. Pandey

Preparation of a Reading Readiness Programme for School Beginners

R. P. Srivastava

A Study of samples of Children's Literature in Hindi for Non Hindi Pupils

Rukmani Sampat

Development of Word Analysis Skills in Hindi for the Higher Secondary Stage

S. P. Upadhyaya

Development of Stories for a Reader for Grade I

C. K. Misra

V. K. Arya

Development of lesson plans for Grade I

Flory Judah

Poems for pupils of Primary Grades

S. N. Niradhar

APPENDIX F

A List of Participants at the Summer Course

Uttar Pradesh

Shri S. P. Upadhyaya,
Lecturer,
Government Central Pedagogical Institute,
ALLAHABAD

Shri G. N. Srivastava,
Lecturer,
Government Constructive Training College,
LUCKNOW

Dr. R. S. Pandey,
Asstt. Professor,
B. R. College of Education,
AGRA

Shri M. S. Rawat,
Asstt. Professor,
B. R. College of Education,
AGRA

Shri S. N. Niradhar,
Lecturer,
Hira Lal V. N. Inter College,
Chibru Mou,
FARUKHABAD

Shri D. D. Pandey,
Asstt. Teacher,
Government Normal School,
NAINITAL

Madhya Pradesh

Shri S. N. Nigam,
Principal,
Government Higher Secondary School,
NAI GARHI (REWA)

Miss Flory Judah,
Lecturer,
Hawa Bagh Women's College,
JABALPUR

Shri H. P. Rajguru,
Lecturer,
Government Basic Training Institution,
Bijalpur, INDORE

Shri P. N. Khare,
Lecturer,
Government Basic Teachers' Training College,
Kundeshwar, TIKAMGARH.

Shri D. C. Mishra,
Asstt. Professor,
Prantiya Shikshan Mahavidyalaya,
JABALPUR

Mrs. C. K. Mishra,
Headmistress,
Govt. Pre-Primary School,
Shanti Nagar, RAIPUR

Rajasthan

Shri R. S. Solanki,
Lecturer,
Govt. Basic S.T.C. Training School,
Govardhan Vilas, UDAIPUR

Shri D. R. Chaturvedi,
Instructor,
Government Basic Training School,
DHOLPUR

Bihar

Shri Krishan Bihari Dubey,
Asstt. Teacher,
Teachers' Training School,
Chirri, RANCHI,
Chhota Nagpur (Bihar) Div.

Delhi

Smt. Rukmani Sampath, .
Headmistress,
M.E.A. Middle School,
Moti Nagar, NEW DELHI

Shri R. P. Srivastava,
Lecturer,
Jamia Millia Islamia,
Jamia Nagar, NEW DELHI

Shri Sadanand Shastry,
Principal,
Government Boys Higher Secondary School,
DELHI

Shri P. C. Jain,
Teacher,
Government Higher Secondary School,
Ajmal Khan Road, Karol Bagh,
NEW DELHI

Shri P. D. Sharma,
Lecturer in Hindi,
Government Co-educational Junior,
Teachers' Training Institute,
Darya Ganj,
DELHI

Shri V. K. Arya
Teacher,
Government Higher Secondary School,
Alipur Road,
DELHI

Mrs. Kamala Daljeet,
Shyama Prasad Vidyalyaya,
NEW DELHI

READING PROJECT

Prof. B. Ghosh
Miss Ahalya Chari

*Head of the Department
Project Director*

Shri D. S. Rawat

Field Adviser

Dr. (Km) Chinna Chacko

Smt. S. Luthra

Shri N. Singh

Shri G. D. Sharma

Shri O.P. Gupta

Km. Indu Seth

Consultants

University of Columbia Teachers' College Team in India

Dr. Constance M. McCullough,

Professor of Education,

Sanfrancisco State College of Education,

California, U. S. A.

Miss Eleanor G. Robinson,

Supervisor, Elementary Education,

Oakland Public Schools, California, U. S. A.



